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AN ADDITIONAL FEATURE OF THE "SCHOOL REVIEW" AND
THE "ELEMENTARY SCHOOL JOURNAL"

Since 1912 the United States Office of Education has been publishing a bulletin bearing the title *Record of Current Educational Publications*, at first monthly and later quarterly. These bulletins constitute an annotated bibliography on a great variety of educational topics and have served the highly useful purpose of keeping students of education informed concerning the current literature in the field. Unfortunately, measures of economy have forced the Office of Education to suspend the publication of these bibliographical bulletins. In view of the distinct need for the kind of service which these bulletins have provided, the *School Review* and the *Elementary School Journal*, beginning with the January issues, will publish each month an annual annotated list of selected references on some significant phase of education.

The plan of organization will follow, with certain modifications, that adopted in the *Record of Current Educational Publications*. References will be selected and annotated by leaders in the fields represented. Each journal will select the topics which naturally appeal most directly to the interests of its readers. There will be, however,

no overlapping of bibliographical information. Thus, there will appear in a full year's issue of the two journals taken together twenty annual annotated bibliographies on twenty significant phases of education. Through the full cycle of twenty issues, ten of the *School Review* and ten of the *Elementary School Journal*, readers will be given access to lists of the best writings in practically the whole field of education. It should be pointed out that this bibliographical service is simply a new feature of both journals; all other features will be continued as formerly. A complete announcement of the topics and collaborators will appear in a later issue.

ON THE DEGENERACY OF SECONDARY-SCHOOL BOYS

The daily press in Chicago has recently given considerable attention to the question of the character of boys in secondary schools. It all began with the report in the *Chicago Tribune* of a severe denunciation of boys in the English public schools (endowed schools which are referred to as "public" because the endowments are open to all) before the British Medical Society by Cuthbert Blakiston, "widely known educator and headmaster of the fashionable Lancing school." Blakiston is said to have referred to these boys as "untruthful, dishonest, timid, cowardly, easily bored—and vain." The following are reported as quotations from his indictment.

There is no comparison between the boys of today and those of thirty years ago. . . . The boys today are indifferent to the traditional interests of gentlemen represented by horses, and above all cricket. Worse still, they are destroying the old boast that an Englishman's word is his bond.

The Duke of Wellington reputedly declared after Napoleon's defeat that "Waterloo was won on the playing fields of Eton." But the Iron Duke ought to see what is happening now.

Above all, the boy of today fears to be alone. He fears loneliness and boredom. This state of things has to a large extent destroyed that keen adventurous outdoor sportsman of other days. It has done much to impair his power of initiative. Youths today don't know how to saddle a horse. They prefer to deck themselves out like peacocks so they will look pretty. Nowadays boys of eighteen or nineteen are unwilling to go abroad and seek their fortunes.

I do not believe it is the mother's fault. The war had a definite effect on those who were infants or were born during the war. Another consequence of the war is a real sense of fear generated in the minds of children today.

In giving corporal punishment, one is bound to notice the fear of physical pain which the modern boy takes no pains to conceal.

Also there is a real lack of principle. A great deal of the difficulty in administering a school today arises from the presence of untruthfulness. Stealing books and gramophone records is regarded as an extended form of borrowing, as well as the impulse expressing itself in "pinching" anything which will adorn their person, such as socks and ties. It is peacockery. The generation of today is suffering from instability.

It was to be expected that, following publication of such a startling statement, reporters would rush to local educational celebrities for their opinions on the subject. Among those interviewed was Superintendent William J. Bogan, of Chicago's public schools, who, while specifically stating that he could not speak for English boys, expressed the belief that the American schoolboy is "just as vigorous and manly, and more civilized than when I was a boy." Superintendent Bogan was quoted as saying that, if the present schoolboy doesn't know horses, he knows about automobiles and electricity; that our idea of a gentleman differs from the English idea; and that our ambition is to educate all rather than the selected few. He indicated that he was proud of Chicago boys of today and thought their boyhood superior to his own. Although emphatic, his statements were less dogmatic than those of Blakiston at the same time that they reflected the faith in youth usually expressed by those who have worked closest and longest with them.

A few days later the discussion was continued in the following discerning editorial in the *Chicago Daily News*.

Down through the centuries the schoolboy has been the target for depreciatory remarks from sour adults. Age is inclined to cast a mitigating haze over the sins of its own remote childhood and to look with wrathful dismay on the faults and peccadillos of the youth immediately before its eyes. One would probably err little in judging that, in his blanket indictment of the English schoolboy, Cuthbert Blakiston, headmaster of a fashionable London school, fell victim to this tendency. But the object of his curdled animadversions probably will find plenty of able defenders.

Superintendent Bogan and others in the Chicago school system, having excellent opportunity for studying the American boy, are emphatic in declaring that the boys they know today are equal in all desirable qualities to the boys they knew—and were—in years long gone. Mr. Bogan, indeed, considers the modern boy more civilized than his prototype, by which he may mean that the youth of the present day is more highly aware of his social and civic environment, more easily adjustable to its demands. With that opinion many will agree. . . .

Adult critics of youth too often forget that the shafts they aim go through the obvious target and stick quivering in heredity and environment for which they themselves are responsible. A boy takes on the coloration of his older world. Post-war stories of the behavior of grown-ups in English society—if some English writers were true reflectors of conditions—may furnish the explanation for such delinquencies as Headmaster Blakiston finds in the pupils of his fashionable school.

Following the war in this country there was for a time much outcry about the follies and depravities of a flapper and cake-eater generation. Happily grown-up America has abandoned that melancholy and self-incriminating attitude. It is more disposed to apologize to the boys and girls of today for the sort of world it is handing over to them and to express the confident hope that they will make a better job of it.

If anything further needs to be said on the subject, it would bear on the temptation, to which many succumb, to generalize for a nation from limited personal observation, as did Blakiston. We may expect laymen to continue to essay these too facile generalizations on educational matters, but, if the progress of objective procedures in our field teaches the educator anything, it warns him against venturing such unsubstantiated snap judgments.

THE ORGANIZATION OF THE CURRICULUM IN LITERATURE

The monographs of the National Survey of Secondary Education include special reports on instruction in seven subject fields, namely, English, the social studies, science, mathematics, foreign language, music, and art. The remaining subject fields, the practical arts and physical education, are treated in connection with other reports. The procedures followed in investigating instruction in the seven fields first named involved detailed analysis of large numbers of course outlines which had been revised since 1925 and visits to the schools reported to be carrying on innovating programs, during which conferences were held by the specialist with those in charge of the work and observations of classroom work were made.

The investigation in English for the survey was made by Dora V. Smith, associate professor in the College of Education at the University of Minnesota. Her report includes the findings secured by the procedures just mentioned and deals with such phases of the curriculum as the objectives in the teaching of composition, analysis of the portions of the courses devoted to composition and grammar, the

objectives in the teaching of literature, the organization of the literature curriculum, and the provisions for individual differences in instruction in English. It is manifestly impossible to give here even a summary of all these portions of the report; therefore, findings will be cited from only one section, that dealing with the types of organization of the curriculum in literature. Owing to the frequent discussion of this problem of organization, it should be interesting to note the extent of deviation from traditional plans.

DISTRIBUTION BY GRADES OF TYPES OF ORGANIZATIONS OF THE
LITERATURE CURRICULUM IN SECONDARY SCHOOLS

TYPE OF ORGANIZATION	GRADE VII		GRADE VIII		GRADE IX IN JUNIOR HIGH SCHOOLS		GRADE IX IN FOUR- YEAR HIGH SCHOOLS		GRADE X		GRADE XI		GRADE XII	
	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent	Num- ber	Per Cent
Literary types..	7	9.0	9	11.5	17	21.8	17	37.0	39	45.3	28	47.5	13	44.8
Theme.....	15	19.2	12	15.4	7	9.0	0	0.0	1	1.2	2	3.4	0	0.0
Theme within type.....	2	2.6	2	2.6	1	1.3	1	2.2	3	3.5	2	3.4	0	0.0
Combined theme and type.....	9	11.5	7	9.0	6	7.7	6	13.0	3	3.5	5	8.5	1	3.5
List by theme and type....	0	0.0	0	0.0	1	1.3	0	0.0	0	0.0	1	1.7	1	3.5
Mere list of classics.....	33	42.3	30	50.0	38	48.7	22	47.8	39	45.3	21	35.6	14	48.3
Objectives or activities....	8	10.3	8	10.3	7	9.0	0	0.0	1	1.2	0	0.0	0	0.0
Built around a textbook....	4	5.1	1	1.3	1	1.3	0	0.0	0	0.0	0	0.0	0	0.0
Unit organiza- tion*.....	13	16.7	11	14.1	12	15.4	3	6.5	9	10.5	7	11.0	3	10.3
Total.....	78	100.0	78	100.1	78	100.1	46	100.0	86	100.0	59	100.1	29	100.1

* Because included with other types of organization, these items are not added in the totals at the foot of the table.

The plans found by Miss Smith in the courses analyzed are shown in the accompanying table. She points out in her report that the frequencies and percentages in this table for Grade XII and in part for Grade XI are less significant than those for other grades because special courses in literature, including those in the history of English and American literature, are omitted from the table and are given separate consideration in another section of the report. It is clear enough that the most frequent type of organization in all secondary-school grades is still the "mere list of classics." However, Miss Smith reports that organization by type of literature prevails in many of

these courses—a fact suggested by the nature of the selections listed and by the teacher helps in the courses. Unequivocal organization by type of literature increases in frequency from 9 per cent in Grade VII to nearly half of all cases in senior high school grades. Teachers in the junior high school and occasionally teachers in the senior high school were found by Miss Smith to maintain that use of type organization is a matter of convenience in handling sets of books and is not indicative of a desire to emphasize literary technique. For instance, where library books are being lent in quantities to the classroom library, teachers point out that it simplifies the procedure greatly to ask for short stories, novels, or one-act plays. There is less likelihood of conflict in requests of teachers alternating the use of materials. Certainly classroom practice gives evidence that some teachers are able to follow a course of study organized by type of literature without overstressing form and technique. That it is equally impossible for others to do so is also apparent.

Predominating types in order of frequency are poetry, drama, and novel. Somewhat less than half the frequency of mention of these is accorded to biography and the essay, and a third to magazines and newspapers, miscellaneous prose, and myths and legends in the junior high school. Little correspondence appears between the frequency of mention of literary types in courses of study and frequency of use in life-situations. Stress on poetry is roughly equal throughout the six grades. The essay predominates in Grade XI, the novel in Grades IX and X, drama in Grades X and XI, and biography in Grade IX. No other types show prominent use in any one grade.

A full fourth of the junior high schools represented follow some form of organization by theme—as many as a third in Grade VII, a fourth in Grade VIII, and a fifth in Grade IX. Data from the courses reveal a more varied reading program and a more natural treatment of selections under this plan than under either of the preceding. The twelve themes in most common use in the courses so organized give significant evidence of adaptation to pupil interests and the broader aims of reading. In order of frequency of mention these themes are: nature and outdoor life, adventure and pioneering, fun and humor, work, patriotism and love of country, travel, animal life, heroes and

heroines of past and present, citizenship and American ideals, history and tradition, home and social life, and school life.

A few courses, roughly a tenth, group the readings by general objectives or around specific activities. This interesting innovation is suggestive of broad educational possibilities. The courses built specifically around a textbook occur for the most part in schools in which a state textbook is set for use in all schools. The references to unitary organization are in connection with certain of the types already described.

THE ADEQUACY OF TEACHERS' SALARIES

Like authorities in many other school systems during 1931-32, those in Oakland, California, sought possible economies in maintaining educational service. The Department of Research of the system applied itself to the task. In the field of teachers' salaries, instead of attempting directly a revision of what seemed a satisfactory salary schedule, the department directed its effort toward determining whether current maximum salaries were excessive, satisfactory, or inadequate in relation to prevailing price levels. Because of the nature of the issues involved, the investigation was undertaken co-operatively with the Heller Committee for Research in Social Economics of the University of California. Members of the teaching staff of Oakland supplied information concerning salary, marital status, dependents, and other factors entering into the standard of living of teachers. Typical groups in relation to these factors were determined. Three estimated budgets were prepared showing the goods and services, the style of house and clothing, the amount of recreation, the provision for old age and death of the breadwinner, which were obtainable on current salaries. The allocation of expenditures was based on all available data indicating how teachers spend their money. "In brief, the estimates attempt to show how the average Oakland school teacher might expect to live at the price level prevailing in the winter of 1931." The summary of the study pertaining to three main types of teachers is quoted.

The typical single woman teacher in secondary schools, who has a salary of \$235 a month and one total dependent, is able to live at a comfort-and-savings standard suitable to her professional status. She can afford to own a small auto-

mobile and set aside each year a depreciation fund for the purchase of a new one, care for an aged mother, make reasonable provision for further professional education, dress suitably, spend \$115 for a vacation, make a comfortable allowance for amusements and pocket money, and still have a surplus to purchase a modest annuity for old age, an endowment policy to protect her dependent mother, and to provide a small savings fund for serious illness, emergencies, or travel.

For the typical married man teacher with a wife and two children dependent upon him, the maximum salary of \$235 a month is not adequate. With the requirements of five years of university training for entrance into the teaching field, constant expenditure for additional training after appointment, and ten years' experience before receiving the maximum, the highest salary to which he can aspire as a classroom teacher is quite inadequate to support his family in even modest comfort at the standard of living of the professional class to which by education he belongs, or to provide for his old age. His family must economize severely on clothing; their recreation must be limited; he cannot afford to hire help for his wife even in the heaviest household tasks, to travel, or to pay for art or music lessons for his children. His annual allotment for medical care is too low to cover serious illness or extensive preventive work for the children. He has no surplus income to save for emergencies or to provide for his own old age. His insurance policy provides scarcely more than one year's income for his family in case of his death. He owns a car, but his budget is too small to provide a regular depreciation fund. The purchase of a new car must be made at the cost of sacrifices in practically every other department of expenditure. To provide reasonable maintenance as a professional man and to raise the standard of a married man teacher supporting a family to a comfort-and-savings level paralleling that of the single woman teacher, his income in Oakland should be \$100 a month greater than it is at present. . . .

The typical single woman teacher receiving the elementary-certificate maximum of \$2,460 a year, who has one total dependent, can live at the comfort-and-savings level of the woman with \$2,820 if she foregoes an automobile. The average woman in this group does not own a car. Those who do must pay for it at the expense of savings and by sharp economies in their general mode of living. The salary of such a woman is probably near the minimum for meeting her obligations as a teacher.

In this summary we have once more demonstrated for us the reason why it is difficult to retain first-class men teachers in most of our secondary schools: their incomes for the work are below the "comfort-and-savings" level essential to a professional married man.

NEW SERIES OF EDUCATIONAL SOUND PICTURES

In connection with the new plan of the University of Chicago, the members of the faculty in charge of developing the new general

courses are preparing, in conjunction with the Erpi Picture Consultants, a research group working under the auspices of the American Telephone and Telegraph Company, four series of educational talking pictures. The plan includes a series of twenty pictures for each of the four general divisions, namely, Physical Sciences, Biological Sciences, Social Sciences, and the Humanities. A published announcement mentions certain of the processes to be presented and techniques to be utilized in the series for physical science, the first to be worked out.

Illustration of natural processes, such as the development of deltas, a river digging a new channel, the action of wind-blown sand on rock formations, can be achieved vividly and accurately through the time-lapse (technically called "slow-motion") technique of the films which makes visible movements imperceptible to the human eye. The ten-minute film shows the tedious processes of days, weeks, months, and years.

Such famous experiments as Michelson's determination of the speed of light can be brought to any classroom in the country by means of talking pictures. . . .

The factor of motion which the pictures provide will be particularly helpful in clarifying other forms of experiments, such as those dealing with electrical phenomena. It will be possible, for example, by means of animated drawings, to illustrate the action of a transformer by tracing the flow of electrons in association with the magnetic field, with considerably increased effectiveness over such devices as charts.

Glaciers at work; the action of wind and water; volcanic action; molecular action—elements and objects from the visible and the invisible world are photographed, to the accompaniment of natural sound, and explained by a master teacher.

Talking-picture presentations need be nothing less than the best. A great master of science, who could not possibly visit the distant classrooms, can here produce or reproduce his experiments with elaborate and expensive equipment difficult or perhaps impossible to duplicate; and the sound disc of his voice will be a permanent record of a master's teaching.

The sound film is a perfect demonstration. The hazards of changing conditions are eliminated. There is no chance of failure in a delicate and costly laboratory experiment.

The telescopic lens of the camera will bring distant objects adequately to the screen, invaluable, for example, in the study of the solar system.

The microscopic lens will enlarge minute living and moving organisms to the size best adapted for study and will show physical changes taking place. . . .

X-ray photography enables observation and demonstration of processes within opaque objects.

Just as slow-motion time-lapse photography, or X-ray photography, makes visible things the human eye cannot see, so does the sound record by means of amplification render audible sounds the human ear cannot hear.

These experiences and this knowledge the student cannot obtain by any other method.

The tentative list of subjects for the series in physical science includes the solar system; the changing surface of the earth; beneath the earth's surface; states of matter; combustion and corrosion; chemical equilibrium; carbon and its compounds; the carbon cycle in nature; time and the calendar; velocity of chemical reactions; electrochemistry; heat and work; electricity; interference of light; sound; weather and forecasting; composition of the atmosphere; energy, work, and power; eclipses of the sun and moon; and decoding the information in a beam of light. Lists for the remaining series have not been announced.

In determining materials to be presented, the Erpi staff consults with faculty members. Subjects that can be adequately presented by textbook or blackboard are excluded. The talking pictures will be made primarily for the purpose of giving the student knowledge which he cannot get elsewhere. There is a process of weeding out, and the endeavor will be to present the significant processes of science rather than the popular or the merely spectacular. The entire plan includes teachers' handbooks and printed material to be placed in the hands of students. The films will be available to high schools, colleges, universities, or adult-education groups anywhere in the country.

THE DECLINING EMPLOYMENT OF CHILDREN

As preliminary figures from the 1930 census for additional states are made available, they bear out the expectation encouraged by earlier reports concerning the employment of children, namely, that the numbers of younger children gainfully employed declined remarkably from 1920 to 1930. For 44 states (all except California, New York, Ohio, and Pennsylvania) and the District of Columbia the preliminary figures show a decrease from 364,604 to 228,149 for children ten to thirteen years of age, inclusive, and from 564,561 to 381,580 for children fourteen and fifteen years of age. Doubtless, the employment of older minors also decreased rapidly during the dec-

ade, and, without question, the last two years have seen an accumulation of the decrease. This trend is imposing a tremendous increment of obligation on the schools. It is exceedingly unfortunate that in many communities these additions to responsibilities should be accompanied by reductions of budgets.

"THE SCHOOLS OF A PEOPLE"

The turn of another year brings the *Twenty-sixth Annual Report of the President and of the Treasurer of the Carnegie Foundation for the Advancement of Teaching*. This issue of the publication is of especial interest because it contains the *first* annual report of the new president of the Foundation, Henry Suzzallo. It was to be expected that his personal contribution to the report would be notable, and perusal bears out the expectation. President Suzzallo's report carries the title "The Schools of a People." Its quality prompts and its brevity permits reproducing the statement almost in full in order to make it available to a larger audience. The only omissions made here are portions of the preliminary paragraphs and brief sections indicating the obvious relationships of the Foundation to the problems made manifest in the discussion.

The present educational situation, as to both organization and procedure, seems to be one of confusion so overwhelming as almost to defy simplifying analysis. But if social history be connected at each decade with educational history, certain fundamental factors emerge to explain and to reduce the apparent confusion. Chief among these are three social factors which have greatly influenced and modified education in the American social civilization: the public control of schools, the expanding school attendance, and the impacts of a changing world.

THE PUBLIC CONTROL OF AMERICA'S SCHOOLS

Our schools are responsive to popular aspiration and consequently to public opinion as is no other national system of education. Schoolmasters determine the purposes and the policies of education, as distinguished from its procedures, far less than do the clients who organize, support, and control the schools through private or public agencies.

The school and its sponsors.—Our form of control is due to the highly decentralized management of our schools. Save in a few specific lines, the federal government has no political power over public education. The state governments, while responsible for the provision of school systems, restrict their authority chiefly to the formulation and administration of minimum requirements, expressed through laws and administrative regulations. In the United States

the 150,000 local school district boards exercise a degree of authority in school management such as exists nowhere else. Local school boards largely determine policy, imitating selected patterns or experimenting anew so as to adjust their educational programs and procedures to regional needs or community aspirations.

What is true of the public, or tax-supported, school system, from free kindergartens to state universities, is even more characteristic of the system of private, or voluntary, schools which parallel and supplement the public schools. Under our system of political and social tolerance any group of citizens may, within very broad limits, organize the kind of school it wishes. It may be one that fosters educational purposes, values, and procedures which the public school has abandoned or which it has not yet accepted, depending upon the temper of the clientèle. Our national school system, in both its tax-supported and its voluntarily supported parts, is therefore most responsive to its supporting community, and its responsiveness may indeed be as varied as its organizing groups.

The genesis of educational experimentation.—The wide range of school performances which we observe in the United States is not the result of a confused professional mind, as some critics superficially assume; it is a clear indication that America is a huge social laboratory in which thousands of sincere, if not always well-advised and well-controlled, experiments are being conducted. Here social aspiration and criticism, both intuitive and scientific, are at work. This social method of free experimentation and free choice as concerns educational purpose, program, and procedure is the complicated American substitute for the simplified orders of a political or educational bureaucracy. And who that is American would have it otherwise, complicated and confused though the situation may seem?

The way out of a confusion which has its source in sincere, widespread experimentation is not to have none of it or less of it, as some persons might seem to suggest. The way out is to be found in thoughtful comparison, in appraisal of our richly diverse educational practices, and in selection and diffusion of the best accomplishments.

Educational experiment and the scientific temper.—The scientific movement, as we now know its operations in the field of education, is somewhat baffling to most scholars in other fields. Originally, scientific inquiry did not devote a major part of its time, energy, and available money to analyzing the current needs of the changed and changing civilization which schools serve, nor did it seek primarily the underlying and fundamental laws controlling human behavior under school conditions. On the contrary, the scientific movement in education seems to have been initiated mainly by the attempt of the scientifically-minded members of the profession to appraise the results of the experimentally created differences of practice which our unique social control of schools stimulated and permitted. Hence the early emphasis and zeal for tests and measurements in American education. Less and less we are confusing the plausible and the ap-

parent with the sound and fundamental. Our new methods of appraisal and choice, scientific in spirit and aim if not in accuracy of procedure and result, are our unperfected but dependable means for reducing the complexity with which rich experimentation has confronted us. . . .

OUR GROWING SCHOOL ATTENDANCE

Our national school system, on all the age levels which it serves, has a greater and more varied school population than other national systems. This is not the product of compulsory-attendance laws. These do not operate above ages fourteen, sixteen, or eighteen, as the case may be. The persistence in school of unusual proportions of the social population far above these age levels in the states concerned indicates that another force or influence is at work.

Education and the aspirations of a people.—Of course, America, from the beginning of its national life, has had a passionate tradition in favor of education. It is the most common social aspiration of Americans as a people. Although we assume that anyone may become anything—even president of the United States or a multimillionaire—our common sense does not permit us to assume that everyone of us will become president or a multimillionaire. But we commonly assume that everyone may become educated. This is our working faith. It is no more ridiculous than our other working faiths, such as the faith we have in our political institutions, where daily disillusionment never quite crushes our continuing hope.

But even a parent's social aspiration for education, and faith in it, will not keep bored and discouraged youth in attendance at school or college very long after the conclusion of the compulsory school-attendance period. The prolongation of a school career for large numbers of the population is to be explained on other grounds. The fact that schools in America are constantly being made over so as to be psychologically suitable to all kinds of boys and girls whom compulsory laws and social aspiration enrol in schools is a more accurate and fundamental explanation of increasing secondary and higher school enrolments.

The responsiveness of the school: causes and effects.—The flexible, adjustable, responsive character of America's school organization keeps the school-leaving age high. It is noticeable that a period of conspicuous reform and reconstruction on any one level of education has usually followed expanded attendance on that same school level. What then are the effects that expanded attendance has on any given school unit, be it primary school, junior high school, senior high school, junior college, senior college, or graduate school? The effects are readily traceable.

Greatly expanded attendance means more different types of human ability and interest to be satisfied, more different kinds of social careers to be served. At first, teachers and school administrators are not aware of this important social and psychological fact. A more or less traditional institution (and what institutions are not?) tries to squeeze every student into the wonted runways that lead to the restricted social services of the previous era which created or re-

formed the school. The old standards are invoked. Many students, particularly the newer types among the new school attendants, fail. Thus youth is dropped from the college rolls and is returned home or dumped into life. At first, there is no sense of failure on the part of the educational profession, only a kind of stern satisfaction that high, but narrow and unsuited, standards have been maintained. The natural view of the student and his parents, neighbors, and friends is that something is wrong with the institution. As personal criticism multiplies, it has its effect on public opinion, and public opinion finally controls and modifies all institutional structures in the public service.

At last public and profession reach a common ground in the admission that inadequacy may reside in both institutions and persons. Educational reforms begin. New courses in liberal education multiply. New types of professional schools are added. New academic elections and privileges are provided. The educational institution has merely proceeded to experiment in the American way in the solution of its new problems, multiplying its devices and procedures in the hope of coping with the situation.

Thus the larger the segment of the social population enrolled in school, the more apparent are the evidences of complexity and confusion. An expanded school population on any age level ultimately forces experimentation and gives the transient impression of confusion.

The way out of this kind of confusion is certainly not in the direction of a return to a simpler nineteenth-century procedure, for an expanded twentieth-century college population is at school. Nor is the way out to say that types of mind that find the old academic purposes and procedures uncongenial shall not be educated. New human wants must be served by new curriculums and new methods of instruction, both well differentiated from the old and traditional provisions.

The answer is not to be found in loosening old standards, but in differentiating the needs of the newly enrolled population and establishing clear, firm educational procedures, and standards which apply to each of them. Holding tightly to both old and new educational purposes, each measure of fitness should be held to its appropriate place. Scrambling students instead of differentiating them is the one unforgivable confusion in the present transitional period of education. From all the other confusions, largely the incidents of a readjustment period, the scientific movement in education promises us escape. The new tests, which attempt to appraise academic and vocational aptitude and measure college achievement, offer us simplification of college organization through differentiation, a sounder ground than we have ever had before.

The organization of a personnel administration for the purpose of getting a better segregation and distribution of students is merely a first, but important, step in bringing order out of confusion in our higher schools. It aims to place students in their proper pews, but the university organization must provide the necessary pews, as different as the capacity and quality of students.

The provisions are not, however, to be as endless as the students who may enrol. Higher education is not merely a personal service; essentially it is a social service, and this purpose dominates. The quantity and quality of specialized services which our social civilization requires are necessarily restricted. Open opportunity under free competition for a limited number of school places in specialized higher education is the social program to which American higher education is yearly more completely committing itself. But the final selections will not be made with favor. Economic and social handicaps in such competitions must be greatly reduced if they cannot be eliminated completely. Society is entitled to the discovery and use of the best minds in its total social population—those best fitted by nature, rearing, interest, and zeal for the specialized, expert services which constitute professional life in our civilization.

Below the senior college, where academic concentration and professional specialization are characteristic, that is, in the junior college or below it, where the ideal of liberal education still inheres, the policy of inclusion may, and should, be more tolerant and generous, for the educational purposes here are still civic and apply to all human beings. Yet even in these lower schools, largely dedicated to liberalization, there is need to differentiate general education by providing various types of curriculums, each of which permits not specialization but a special focus or emphasis in wide learning, which takes into account the personal interest or the imperious bent of each student.

This need was early recognized in a fumbling, empirical way. First, our organization provided departmental majors; later, a core curriculum with electives; again, election among parallel curriculums variously devised. Now, with more accurate knowledge gained through the scientific efforts of the educational profession, we make a wiser provision. Each curriculum among those offered emphasizes some dominant outlook natural to human interest, such as the scientific, literary, social, technological, artistic, or philosophic. The college reorganization of faculties reveals the same trend in the dominance now given to divisions and schools representing fields of knowledge, as contrasted with the older eminence of the department or the subject. . . .

THE AMERICAN SCHOOL IN A CHANGING WORLD

Our schools exist in, and ought to be devised to serve, our American civilization, as it changes. We live in a changing world, and an educational system which does not constantly readjust itself puts a heavy charge on persons who become socially maladjusted and on the community as a whole, which always pays a price for the evil consequences of an ineffectively conducted civilization.

The pupil and society.—No school system can keep up to the minute, but it can give its students a projective efficiency which will enable them to keep up to the minute. The American school system has already begun to respond to this need. It does not treat the period of life which it controls as the whole of education—a too frequent implication of common speech. Instead, it assumes that

the school cannot teach the student all he ought to know, appreciate, and command. It emphasizes self-education in school as well as continuing self-education after schooling is done. It tries to make an independent, self-directing, and self-educating student. Less and less it teaches him what he ought to believe and do, and more and more it aims to educate him in the processes of thought and decision. Its academic standards come into closer accord with enlightened social standards. Schools reduce the ancient importance which they once gave to the artificial signs, symbols, and rewards of school success—to credits, marks, academic distinctions, certificates, diplomas, and degrees. The student of today knows, as he did not know before, that the real fruits of academic achievement are the successful services which he renders in after-school life. He is less expectant of immediate and guaranteed recognitions by a lay world. All these symptoms of reform move in the direction of making higher education a better instrument for developing citizens and specialists who can effectively participate in a rapidly changing civilization, directing or co-operating as individuals or as members of groups in giving desirable direction to impending change. . . .

THE MEASUREMENT OF ORIENTATION

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THE PROBLEM OF ORIENTATION

Recent years have seen decided interest in the intellectual orientation of the college student. So desirable has seemed the objective of a working familiarity with all fields of human knowledge that special survey and orientation courses have been introduced into many Freshman curriculums. By such techniques it has been hoped that the student would get his bearings in the midst of the multitude of complicated and interrelated facts and items which constitute our knowledge of the world and of man. Survey courses have tended to bridge the gap between the secondary school and the university and college. They have provided a more rational initiation into the mysteries which are higher education and have tended to prevent intellectual floundering. They have provided a better background for choices of academic specializations and of vocations. It is doubtful, however, whether such techniques have proved sufficiently comprehensive, for but little has been vouchsafed as to the nature of orientation or the factors which militate for such a desirable, discriminative skill.

Apparently, orientation as a process, a function, or a capacity has not been subjected to scientific scrutiny. We are not sure whether orientation is a process which is a necessary by-product of a broad, general education or whether it has characteristics quite independent of exact knowledge of the various arts and sciences. We do not know whether orientation depends on the accuracy of factual data acquired in the various fields of learning or whether it is a more superficial skill which may be imparted hurriedly with a resultant ability to find one's way in the morass of modern science without reference to essential meanings. We have no valid measures of orientation, nor do we know the variations in individual differences. We do not know whether all college Freshmen enter the university

with the same level of orienting skill, nor do we know the extent or the nature of the gap between those who may be considered well oriented and those who are definitely unoriented. It would seem desirable to have more detailed knowledge concerning these items if we are to continue to think of orientation as a distinct objective differentiated from, though probably contingent on, a broad general education.

A TEST OF ORIENTATION

In order to gain some insight into the whole process of orientation, the writer devised an objective test designed in such a way as not to require factual accuracy in any of the fields of knowledge which were considered. Only three subjects were included in the test: economics, psychology, and sociology. The impetus which gave rise to the study was a desire to know how well high-school graduates who lacked specific training in these three fields were acquainted with the types of facts comprising these specializations.

The basic assumptions in the construction of the test were (1) that orientation in the fields of economics, psychology, and sociology is synonymous with comprehension of the nature and the scope of these subjects; (2) that the degree of comprehension may be measured by determining (a) what types of facts an individual associates with the subject names, (b) what types of facts an individual associates with similar facts though he may be ignorant of the formal names, and (c) what formal definitions the individual associates with the subject names; and (3) that a total score based on the results of *a*, *b*, and *c* constitutes at least a fairly accurate measure of orientation in these three fields.

The test consisted of seventy-three items. Seventeen items dealt with economics, seventeen with psychology, seventeen with sociology, and the remaining items with other subjects, some of which occur in the usual high-school curriculum. Of these seventy-three items, only the fifty-one dealing with economics, psychology, and sociology were considered in scoring the test.

Items such as the following were considered representative of economics.

A majority of the corporate wealth of the country is controlled by a relatively small number of men.

Unearned increments may be caused by many factors.

Scientific discoveries have led to cheaper production.
Electricity and gas are furnished us by public utilities.
The third order of industry contains the dealers in raw materials.

Items such as the following were considered representative of psychology.

A dog discriminates between and recognizes a large number of people.
When first expounded, "behaviorism" created considerable excitement.
We learn best when we have some good reason for learning.
Habits not used are soon lost.
Scales for measuring extroversion have been tried.

Items such as the following were considered representative of sociology.

Merely distributing money and food does not solve the problem of poverty.
Recent years have seen a great increase in the divorce rate.
We no longer punish a person for being insane.
The newspaper is a dominant factor in controlling public opinion.
Ancestor-worship increases the dominance of the elders.

The test was composed of three parts. The directions for Part I were as follows:

Each of the 32 facts below is taken from one of the ten fields of human knowledge listed immediately following this explanation. Place the proper subject number in the () which precedes the sentence.

- | | |
|----------------|---------------|
| 1. Physics | 6. Economics |
| 2. Sociology | 7. Chemistry |
| 3. History | 8. Psychology |
| 4. Archaeology | 9. Biology |
| 5. Geometry | 10. Anatomy |

Appended to these directions were eight facts from economics, eight from psychology, eight from sociology, and eight from the remaining subjects.

The directions for Part II were as follows:

Each of the three following statements is taken from one of three specialized fields of human knowledge. Read them carefully and decide what other facts would be classified with them.

1. The lie detector utilizes the fact that emotions affect the functioning of the heart.

2. We can only guess at the number of engineers we should be training.

3. Both the church and the state have claimed jurisdiction over marriage.

Each of the following 24 facts is taken from one of the three specialized fields illustrated above. Place the corresponding number in the () preceding the fact.

Second sets of eight facts from the three fields were listed after these directions. Since the directions for this part of the test were rather complicated, they were explained orally.

Part III consisted in matching formal definitions with the subject names. The individual was requested to pick out the best definition for each of the ten subjects listed in the directions for Part I.

The test was administered to 349 members of the graduating classes of three Chicago high schools. One was a private high school which used a selective-entrance process, one was a public high school offering general courses, and the third was a boys' technical high school. The test was scored only for a total score in economics, psychology, and sociology. Each item correctly associated counted as one point, while each item wrongly associated with any of the three subjects detracted one from the score. A perfect score was 51.

No exact measure of the statistical validity of the test could be secured since there were no criteria with which to compare the test scores. In fact, the test itself may be said to carry its significance on its face. However, an attempt was made to justify the assumption that the test measured comprehension of the nature and scope of economics, psychology, and sociology. In this attempt the test was given to a group of adults, all of whom were considered well oriented in these fields but none of whom had specialized in economics, psychology, or sociology. The scores of the adults indicated almost complete agreement with the writer in his choice of items as representative of the three subjects.

A measure of the reliability of the test was secured by scoring the test by halves. The correlation coefficient between the two halves was .71. Use of the Spearman-Brown formula gave a reliability coefficient of .85 for the lengthened test. This correlation was deemed by the writer to be sufficiently high to warrant faith in the construction of the test.

Since Parts I and II were designed to measure two assumedly different types of associations, the composite of which was to represent the total score, a correlation between these two parts was determined. One hundred papers were used in this calculation. That the correlation coefficient (.28) was low was to have been expected since in the construction of the test the writer had proceeded on the theory

that the association of facts with the subject names and the association of facts with similar facts without mention of the subject names were two aspects of orientation. It is possible that a higher correlation coefficient would have been desirable. If, however, the correlation had been very high, the writer would have concluded that Part II was superfluous and that the two assumed aspects of orientation were either identical or always co-existent. Another explanation for the low correlation is the fact that, since the items in Parts I and II were not identical, acquaintance with the items in either part did not necessarily imply acquaintance with the items in the other part. The adults who were assumed to be well oriented scored equally well on both parts of the test. This fact indicated that both parts of the test correlated high with the criterion.

Since Parts I and II had a low correlation with each other, the writer concluded that they measured two aspects of orientation not necessarily identical nor always co-existent and that, since each part had a high correlation with the criterion, a combination of both parts was a better measure of orientation than either part taken alone. If, however, it was assumed that Parts I and II measured identical or nearly identical aspects of orientation and that the correlation coefficient was the result of another split method of scoring, then application of the Spearman-Brown formula gave a reliability coefficient of .44 for Part I augmented by Part II.

Intercorrelations between the three subjects were: economics and psychology, .60; economics and sociology, .56; and psychology and sociology, .45. These were deemed sufficiently high to warrant a composite score, although the results might have been even more pronounced if each subject had been considered separately.

Further information concerning the construction of the test was determined by a qualitative analysis of errors on typical papers. An individual did not tend to make the same errors among the same subjects. If confusion existed concerning the nature and scope of psychology, he did not always confuse it with economics but displayed a wide range in his erroneous choices. This fact is held by the writer to be significant in that evidence of systematic errors would have indicated that the test was so constructed as to elicit a definite system of erroneous associations and that the individual's comprehension of the subjects was not being fairly tested.

TEST SCORES

Scrutiny of typical papers led to arbitrary assignment of evaluations to the numerical scores. A score of more than 40 was considered indicative of excellent orientation; 26-40, fair to good; 1-25, doubtful; and -10-0, very poor. The 349 students are classified according to this scheme in Table I. The three schools did not make equally good showings. The private high school ranked highest, the general high school second, and the boys' technical high school lowest. Apparently, high-school graduates vary greatly in their comprehension of the nature and scope of economics, psychology, and sociology. If the test is a valid measure of orientation, it may be assumed that only 3.44 per cent of the high-school graduates have

TABLE I
DEGREE OF ORIENTATION OF 349 HIGH-SCHOOL GRADUATES

Degree of Orientation	Number of Pupils	Percentage of Pupils
Excellent.....	12	3.44
Fair to good.....	83	23.78
Doubtful.....	233	66.76
Very poor.....	21	6.02
Total.....	349	100.00

sufficient understanding of these three fields to make a wise choice of college curriculums or electives which might include such studies.

FACTORS INVOLVED IN ORIENTATION

Several factors are undoubtedly influential in determining the degree of success of an individual on the test. Clearly, the factor of general intelligence must enter into his reaction to the items comprising the test and, in part, determine the score achieved. Perhaps of equal importance with general intelligence is the factor of scholastic habits and achievement. Intelligence alone is not sufficient but must be coupled with habits of application and genuine scholastic interest. A combination of general intelligence and scholastic ratings would be expected to be of greater significance than either factor alone.

Since certain subjects offered in secondary schools are closely related to the fields of economics, psychology, and sociology, part of

the success of an individual on the test may be attributable to contact with these subjects. Closely related are history and the various subjects generally known as the social studies. There are other places besides the school where the individual may secure information on economics, psychology, and sociology. Home environment may conceivably be an important factor, and random factors—such as unguided reading, lectures, and casual conversations—may in some cases be of greater significance than any of the other factors involved.

It is reasonable to expect that success on the test depends on a combination of all these factors—general intelligence, scholastic attitudes and habits, related content matter acquired in certain of the secondary-school subjects, home and community environment, and random and accidental contacts. In order to arrive at some generalizations concerning the causes of such variations in success on the test, the writer studied and analyzed the available data relevant to each factor.

Scores on the Otis Self-Administering Tests of Mental Ability, Higher Form A, were available for 116 individuals. Comparison of the intelligence quotients and the test scores of these 116 persons revealed wide variations. Table II shows the highest and the lowest test scores in various intelligence levels and the range between the highest and the lowest scores. A correlation coefficient of .40 was obtained between the intelligence quotients and the test scores of 116 individuals. This coefficient and scrutiny of Table II indicate that general intelligence is a factor, but by no means the determining factor, in achieving success on the test.

Scholastic averages for the last three years of high school were available for the group at the boys' technical high school. A correlation of .47 was found between these averages and the scores on the test, indicating, as in the case of the intelligence quotient, that the factor of scholastic attitudes and habits as reflected by scholastic achievement give a partial explanation of the test scores.

No particularly definite relation was discovered between success on the test and the amount of history and social sciences studied. There was a tendency for individuals who had studied history for seven or eight semesters to secure better-than-average scores on the

test. A similar tendency was evident for those who had had more social studies than the average high-school pupil. These tendencies were, however, slight in extent and not nearly so definite as might have been expected.

The only available data on the cultural and educational background of the home consisted in information concerning the occupations of the adult members of each family. A modified form of the Barr scale for rating occupational intelligence was used.¹ A correlation coefficient of .41 between the test scores and the ratings on this

TABLE II
VARIATION IN TEST SCORES OF 116 STUDENTS ACCORDING TO
INTELLIGENCE LEVELS

Intelligence Quotient	Highest Test Score	Lowest Test Score	Range between Highest and Lowest Test Scores
135-39.....	33	24	9
130-34.....	39	27	12
125-29.....	44	19	25
120-24.....	43	- 6	49
115-19.....	42	- 9	51
110-14.....	36	1	35
105-109.....	42	- 1	43
100-104.....	23	- 9	32
95-99.....	30	2	28
90-94.....	26	- 8	34
All intelligence quotients	44	- 9	53

scale indicated that home environment might be considered a factor in determining success on the test.

Personal interviews with individuals securing high scores on the test revealed in all cases some definitive experience which tended to improve the orientation of the individual in the fields of economics, psychology, and sociology. All these individuals had read articles dealing with these subjects. This reading was largely unguided and represents one of the large chance elements in the determination of the extent of knowledge of the three fields. In a number of the homes authoritative literature was available. The reading of other students was confined to newspapers, magazines, and books chosen at

¹ Lewis M. Terman and Others, *Genetic Studies of Genius*, I, 66-69. Stanford University, California: Stanford University Press, 1925.

random from library shelves. Most of the individuals with high scores attributed their success to the influence of some person with whom they associated—perhaps one of the parents or an older brother or sister who was majoring in one of the three fields. One boy attributed all his information to the minister of his church, who had at one time been a college professor and who was greatly interested in the three subjects. Conversations with older persons and with others of their own age played a prominent part in this method of acquiring information.

Apparently all the factors considered have some definitive relation to the process of orienting the individual. None alone seems sufficient to explain the individual's situation.

Standard scores were determined for the intelligence tests, the scholastic averages, and the social-background ratings. A correlation coefficient of .67 was found between the test scores and the sum of these standard scores, indicating that the individual who was fortunate enough to possess a high intelligence, fine study habits and academic attitude, and a cultured home environment was relatively certain to become rather well oriented in the academic fields under consideration. Random factors and the influence of certain high-school studies conceivably might make up the difference between this coefficient and 1.00.

INFERENCES

The study has led the writer to a number of inferences which may prove of value to those who are interested in the intellectual orientation of the student and in his educational and vocational guidance. The following are the most significant of these inferences.

1. It is possible and highly desirable to devise tests which will measure with reasonable accuracy the degree of intellectual orientation in the various academic fields.
2. Such tests need not be based on factual accuracy but may be designed to measure only familiarity with the nature and scope of intellectual specializations. Such tests should prove of especial value when used in conjunction with the comprehensive examination.
3. The administration of such tests should prove of value in determining the nature of the orientation program best suited to the needs of the individual.

4. A more detailed and thorough study might give valuable information concerning the process of orientation and the factors involved, especially if in the light of experience we conclude that intellectual orientation is a distinct function. Such knowledge is vital for the most effective orientation procedure.

5. A modified form of the technique utilized in this study might be used to determine the orientation of individuals at all levels in the school system. How well does the ten-year-old child organize and classify his knowledge? Has he begun to toss various phenomena into proper categories? How closely does the development of academic specializations parallel the growth of intelligence? It is possible that growth in this capacity represents a vital item in intellectual maturing and warrants independent techniques of measurement.

6. Such tests, properly constructed and administered, should be of use at certain junctures in the school system. It might be well to determine the orienting skill of the individual at the time of his entrance into the junior high school, the senior high school, the junior college, and the senior college. This procedure would give, in addition to information concerning the student's general intelligence and achievement, an insight into his method of organizing his knowledge and an estimate of his maturity in this skill.

A SURVEY OF THE READING ACHIEVEMENT OF PUPILS IN LOW-TENTH GRADE

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It has long been recognized that the ability of pupils to read influences materially their accomplishment in many phases of school work. So important is this skill that in many schools pupils are classified into sections solely on the basis of their ability in reading, and most classification plans take this ability into account either directly or indirectly. In the elementary schools the most capable teachers recognize that pupils who are poor readers cannot do the work in other school subjects which would normally be expected of them. Such teachers consciously attempt to adapt instruction to the reading level of their classes.

However, there are teachers who do not appreciate the seriousness of reading disability and who attribute the resulting poor work to low mental ability, ineffective study habits, or to poor teaching in the preceding grades. While this attitude is rather more common in the high school than in the elementary school, many high-school teachers have become aware of the true situation with regard to the reading ability of their pupils, and in recent years numerous articles have appeared describing the results of reading tests, learn-to-study classes, and remedial instruction in reading given in high school.

The procedure for the discovery of reading difficulties which is used in the senior high schools in Oakland is thought to be worth reporting because of the type of reading test given and the simplicity of the plan for making use of the results. During the second week of each semester a reading test is given to all incoming members of the low-tenth grade. The test is given for the purpose of obtaining a measure of the reading achievement of the poorer readers in the class rather than an accurate measure of the achievement of the entire group in reading. For this reason, the Stanford Reading Examination is used. This test is probably satisfactory for use in the high-

seventh grade and gives reasonably satisfactory results through the eighth year, but it does not adequately measure the better readers in the ninth grade. It may be expected, therefore, that the test will give a fairly good measure of the achievement of the entire class in reading and an excellent measure of those pupils in the group whose reading achievement is below the norm for the high-eighth grade. The reliability of the test is .93 for a single grade range, which is sufficiently high for the results to have considerable value in locating individual pupils with serious reading difficulties.

Form Y of the test was given in the autumn semester of the school year 1931-32 to the entire tenth grade. The results, expressed in age norms, are given in Table I. The skewed distribution results from the fact that the test does not have sufficient "top" and the reading achievements of the better readers in the class are not adequately measured. It is believed that a comparable range of reading ages will be found in most tenth-grade classes in which the type of population is similar to that found in Oakland. The median intelligence quotient for this class, obtained from the Terman Group Test of Mental Ability, is 99; the median mental age, therefore, is approximately fifteen years and three months. The median reading age of fifteen years and seven months exceeds the median chronological age by two months and the median mental age by four months. Consequently, the median reading age is reasonably satisfactory. However, the test was not given for the purpose of comparing medians, and little significance should be attached to these medians.

The assumption was made that a pupil whose score equaled or exceeded the norm set by the authors of the Stanford Reading Examination for the beginning of the high-eighth grade (a reading age of fourteen years and four months) could read sufficiently well to do low-tenth-grade work and that, when a pupil's score fell below that point, serious question must be entertained as to his ability to read the textbooks ordinarily used in the senior high school and to do the work usually expected there. If this assumption be accepted, it will be noted that seven hundred pupils, or 35 per cent of those who took the test, were unable to do standard work in the low-tenth grade. This percentage varied considerably in the different schools in the city. The distributions of reading ages in two senior high schools

are given in Table II. In School 1, 48 per cent of the pupils failed to reach the norm for the high-eighth grade, and in School 2, 13 per cent failed to reach the same norm. It is evident that the instructional problems in these two schools are materially different.

TABLE I

DISTRIBUTION OF PUPILS IN LOW-TENTH GRADE IN OAKLAND PUBLIC SCHOOLS ACCORDING TO CHRONOLOGICAL AGES AND READING AGES AT BEGINNING OF SCHOOL YEAR 1931-32

AGE IN YEARS AND MONTHS	NUMBER OF PUPILS	
	Chronological Age	Reading Age
Below 9-0	0	3
9-0 to 9-3	0	3
9-4 to 9-7	0	2
9-8 to 9-11	0	5
10-0 to 10-3	0	10
10-4 to 10-7	0	17
10-8 to 10-11	0	19
11-0 to 11-3	0	24
11-4 to 11-7	0	42
11-8 to 11-11	0	52
12-0 to 12-3	0	43
12-4 to 12-7	1	64
12-8 to 12-11	3	79
13-0 to 13-3	8	55
13-4 to 13-7	12	56
13-8 to 13-11	34	81
14-0 to 14-3	98	34
14-4 to 14-7	142	111
14-8 to 14-11	251	90
15-0 to 15-3	339	118
15-4 to 15-7	312	104
15-8 to 15-11	297	186
16-0 to 16-3	215	208
16-4 to 16-7	110	133
16-8 to 16-11	87	119
17-0 and above	82	333
Total	1,991	1,991
First quartile	14-11	13-9
Median	15-5	15-7
Third quartile	15-11	16-6

In order that the purposes for which the test was given might be accomplished, it was necessary to bring forcibly to the attention of the teachers the differences in reading achievement of the pupils in their various sections and among the pupils in any one section. A simple reading chart was prepared in the central office and was dis-

tributed to the different high schools with the test blanks. This chart was used in all classes¹ in which 50 per cent or more of the pupils were in the low-tenth grade. The names of the pupils were written or typed in squares in columns corresponding to the reading

TABLE II
DISTRIBUTIONS OF PUPILS IN LOW-TENTH GRADE IN TWO SENIOR
HIGH SCHOOLS IN OAKLAND ACCORDING TO THEIR READING
AGES AT BEGINNING OF SCHOOL YEAR 1931-32

AGE IN YEARS AND MONTHS	NUMBER OF PUPILS	
	School 1	School 2
Below 9-0	2	0
9-0 to 9-3	1	0
9-4 to 9-7	1	0
9-8 to 9-11	2	1
10-0 to 10-3	5	0
10-4 to 10-7	10	1
10-8 to 10-11	11	0
11-0 to 11-3	9	1
11-4 to 11-7	15	0
11-8 to 11-11	17	5
12-0 to 12-3	18	0
12-4 to 12-7	21	1
12-8 to 12-11	24	5
13-0 to 13-3	12	10
13-4 to 13-7	8	6
13-8 to 13-11	18	4
14-0 to 14-3	8	3
14-4 to 14-7	25	8
14-8 to 14-11	14	7
15-0 to 15-3	17	20
15-4 to 15-7	9	15
15-8 to 15-11	30	24
16-0 to 16-3	33	22
16-4 to 16-7	23	25
16-8 to 16-11	15	27
17-0 and above	32	90
Total	380	275
Median reading age	14-5	16-4

ages. This work was done in the high-school principal's office, and the completed charts were given to the teachers.

Most teachers would recognize the value of such charts in School 1, but many would question their value in School 2. Two charts from School 2 are given to illustrate the charts and their use. The classes represented are two sections of English III. Even a cursory inspec-

¹ Charts were not prepared for classes in physical education, shop subjects, or sewing.

tion of these charts shows that the two classes were in need of different educational treatment and further that within each class some differentiation of instruction must be made. After the teachers had had an opportunity to study the charts, the principal held a conference with each of the teachers concerned. Plans were then worked out by which the instruction might be brought to meet the needs of the particular group in question.

Except in the case of the pupils who were new to Oakland schools during the semester, a substantial amount of objective information was available for each pupil, for example, intelligence-test records, achievement-test records, health ratings, attendance records, and scholarship records. Cards were on file which gave much valuable information about the pupils' personal characteristics, home environments, interests, special abilities, etc. The teachers had access to this material and used it frequently in continuing the study of their pupils, since variability in reading achievement suggested similar variability in other fields.

In many cases instruction was materially modified as a result of the information secured in the reading tests. In one class in which the textbook was too difficult for the pupils to read with profit, the use of the book was discontinued, and library books, government bulletins, and other supplementary materials were substituted. In many classes pupils were grouped into two or more sections within the room, distinctly different educational treatment being given the several sections. Making the teachers conscious of the differences among the pupils in their classes has been very helpful in adapting instruction to the needs of individual pupils and in the improvement of instruction within the schools generally.

In addition to the plan already described for making teachers conscious of the reading achievement of the pupils in their classes and of the necessity of giving this factor consideration in the instructional programs, an attempt was made in many high schools to improve the reading achievement of those pupils whose reading-test scores were below the standard fixed for satisfactory high-school work. Classes in reading, which were called "Learn To Study Classes" in order to impress the pupils, were organized in several schools, and the reading instruction offered was substituted for portions of the

CHART SHOWING READING AGES OF PUPILS IN A CLASS IN ENGLISH III IN SCHOOL 2

[illegible]

Reading Ages in Years and Months

1

1

Reading Ages in Years and Months

regular work in English in the low-tenth grade. In other schools coaching groups were maintained for these pupils, and in one school a program of home study was worked out and put into effect. No check-up test was given as it was thought best to ask the teachers to do as little additional work as possible, but as a result of these procedures the teachers reported that many pupils showed distinct improvement in the ability to do the work of their classes.

The plan of giving the Stanford Reading Examination during the second week of the semester to the pupils entering the low-tenth grade and making a reading chart for each class seems to have the following advantages. (1) The test is easy to administer and requires little time for scoring. (2) A wide range of scores is obtained in the lower third of the distribution. This range would not be secured if a more difficult test were used. (3) The information is secured early in the semester and is thus more valuable. (4) The reading chart used is simple and easily understood. (5) The chart furnishes a definite basis for conferences between principal and teacher. (6) The necessity for adjusting instruction to the needs of the class and to different groups within the class is made so obvious that a teacher finds it difficult to refuse to recognize the necessity.

THE PROBLEM OF PUBESCENCE IN JUNIOR HIGH SCHOOL BOYS

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ACKNOWLEDGED IMPORTANCE OF ADOLESCENCE

The studies in pubescence of which this article is a partial report were carried on by the writer, with the assistance of a group of twenty co-operating teachers, in the Foch Intermediate (junior high) School, Detroit, Michigan, during the second semester of the school year 1929-30.

The literature of adolescence is increasing. Authors of the more recent contributions are not in agreement with the earlier writers on several points, yet in one respect they all adopt the same point of view, namely, that the adolescent years are of immense importance in the life of the individual. G. Stanley Hall wrote in 1904:

The adolescent stage of life has long seemed to me one of the most fascinating of all themes . . . most inviting study, and in most crying need of a service we do not yet understand how to render aright.¹

In 1914 Irving King said:

No period of life has been so celebrated in literature as has the period of youth, or adolescence. Nor is it a time which has interested only the poet and the story-writer; the scientist, also, in his search for new fields for investigation finds in youth as many problems as he may well desire. . . . Certainly no period of life is more apt to be misunderstood by older people than is this; nor is there an age upon which, in the name of science, greater extravagancies of thought and more exaggerated assertions have been lavished.²

Fowler Brooks points out that some understanding of the importance of the adolescent years and appreciation of their significance have always been in the minds of people.³

Not all authorities name the same ages as marking the limits of

¹ G. Stanley Hall, *Adolescence*, I, xviii. New York: D. Appleton & Co., 1904.

² Irving King, *The High-School Age*, p. vii. Indianapolis, Indiana: Bobbs-Merrill Co., 1914.

³ Fowler D. Brooks, *The Psychology of Adolescence*, p. x. Boston: Houghton Mifflin Co., 1929.

the period of adolescence, but the differences are slight and probably unimportant. It may be said that, in general, the period extends from about the age of twelve to about the age of twenty, embracing the years known as the "teens." As to the meaning of adolescence there is general agreement. It is considered by all commentators to mean the period of "growing-up" (from the Latin verb *adolescere*, to grow to maturity). Some authorities have divided the whole life-period into stages, of which adolescence is one stage, and some have subdivided these stages into smaller divisions. Subdivisions of the adolescent period are common. The number of such subdivisions varies, but it seems useful to recognize two such divisions and to designate them, respectively, as "early adolescence" and "late adolescence." In such a classification early adolescence would be considered to include the period from pubescence to about sixteen years of age and late adolescence the period from about sixteen to twenty.¹ The principal reason for distinguishing between early and late adolescence is the fact that the phenomenon of pubescence marks the beginning of the first stage and this development, together with the rapid physical growth at about the same time of life, creates conditions which, as a rule, do not exist after the age of sixteen and which seem to warrant the study of early adolescence as a separate problem. The studies to be described here have to do with the earlier period only.

The outstanding fact in pubescence is that at this period there are striking changes in the reproductive mechanisms of both sexes. Since this study had to do with boys exclusively, only male puberty will be considered in the present discussion. By means of a process of growth which is not clearly understood, the original sex cell becomes differentiated through modification and division into what are known as "spermatozoa." The actual formation of these spermatozoa is believed to be the chief physical fact of male puberty. The sperm is secreted in the testes, which now grow rapidly, as do also the glands which function in the digestive processes, in the control of growth and metabolism, and in the processes of elimination.² It is to be remembered in this connection that at the time of pubes-

¹ Frederick Tracy, *The Psychology of Adolescence*, p. 11. New York: Macmillan Co., 1920.

² G. Stanley Hall, *op. cit.*, 418.

cence there is very rapid physical growth of almost all kinds—muscular, glandular, and skeletal. Height and weight constitute two of the simplest measures of physical growth. According to Schwab and Veeder, the curve of annual increase in weight rises sharply at the age of fourteen in boys, where the greatest annual gain (approximately fifteen pounds) occurs, while at the same age there is a corresponding increase in height.¹ Similar figures are given by Baldwin² and others.

In addition to the primary sex differentiation involved and the formation and secretion of sperm, there are also the accessory or secondary characteristics, such as the growth, distribution, and change in texture of the hair about the pubic region, the growth of the beard, and the change in the voice. These secondary changes are held to be an important part of the sex differentiation and are considered indications that the boy is undergoing the development of puberty. In particular, the growth of pubic hair is considered a criterion of pubescent growth. This period of growth is somewhat brief, usually considered as lasting from five to twelve months. At the end of this period the power of procreation is established.

PROCEDURES IN THE INVESTIGATION

In the determination of the pubescence status of the boys for the purposes of this study, the co-operation of the health-education department of the schools was enlisted. This department has worked out a method for the classification of boys into three groups according to the generally accepted criterion of the growth of pubic hair. These three stages are designated as pre-pubescent, partially pubescent, and pubescent, respectively. The pre-pubescent rating is given to the individuals with no pubic hair, and the other two ratings to those boys with partial and full growths of pubic hair. (The last two of these classes correspond to stages designated in the studies by Crampton as pubescent and post-pubescent, respectively.³) Those

¹ Sidney I. Schwab and Borden S. Veeder, *The Adolescent: His Conflicts and Escapes*, p. 9. New York: D. Appleton & Co., 1929.

² Bird T. Baldwin, *The Physical Growth of Children from Birth to Maturity*. University of Iowa Studies, First Series No. 50. Iowa City, Iowa: University of Iowa, 1921.

³ Charles Ward Crampton, "Physiological Age," *American Physical Education Review*, XIII (March-June, 1908), 141-54, 214-27, 268-83, 345-58.

individuals who were rated as pre-pubescent and partially pubescent at the beginning of the semester were re-examined at the end of the semester to determine whether or not their status had changed.

After arranging the procedure for the pubescence examinations, the investigator next made plans for the observation reports to be made monthly by the co-operating teachers. No attempt was made to have the teachers make ratings of the degree or extent of the different types of behavior observed; they were merely requested to indicate that the behavior had or had not been observed. They were not even asked to indicate how many times the behavior had been observed or to attempt descriptions of their observations. It was thought that the observations could best be made under circumstances which were as nearly normal as possible and that an elaborate recording scheme might endanger the purposes of the investigation; hence, forms were prepared listing several types of behavior in such a manner that it was merely necessary for the teachers to underline the appropriate words. Each teacher was asked to select fifty boys for observation without regard to age, grade, scholarship, or any other factor. Conferences were held by the investigator with the teachers in small groups. The teachers were given a month's supply of observation-report forms at the beginning of each observation period. When these had been filled in, they were returned to the investigator, who then gave out the next month's supply with only the names of the boys recorded on them. No teacher kept any record in a subsequent month of his observations in previous months.

The only item on the observation report requiring a purely subjective judgment was conduct, which was to be marked in terms of good, fair, or poor. This item was included because the investigator thought that it would be of interest to discover whether or not there were differences in the teachers' ratings of the behavior of boys of different stages of maturity.

In addition to conduct, the other factors studied were scholarship marks, attendance, punctuality, school citizenship (for these the regular school records were used), and the following items of behavior believed to be characteristic of early adolescence:

1. Special conduct reactions (disobedience, defiance, inattention,

lack of application, cheating, talking without permission, and display of temper).

2. Emotional and other peculiarly adolescent reactions (marked awkwardness of movement, facial or other automatisms, daydreaming, emotional instability, infantile behavior, restraints or inhibitions, and alternations of mood).

3. Tendencies to adolescent diseases (anemia, headache, marked nervousness, nosebleed, and palpitation of the heart).

4. Attitude toward girls (attentiveness, infatuations, flirtatious attitudes, writing and receiving love letters, shyness, indifference, and antagonism).

It will be noted that in a few cases the behavior would not necessarily be observed (as in the disease tendencies); in such cases the teachers reported whether the boys had mentioned instances of the tendencies in question.

RESULTS OF THE INVESTIGATION

Status of pubescence.—The distribution of 573 boys of the observation group according to their pubescence status in January, 1930,

TABLE I
DISTRIBUTION OF 573 BOYS ACCORDING TO STAGE OF PUBESCENCE
IN JANUARY, 1930, AND JUNE, 1930

STAGE OF PUBESCENCE	JANUARY, 1930		JUNE, 1930	
	Number of Boys	Percentage of Boys	Number of Boys	Percentage of Boys
Pre-pubescent.....	95	16.6	77	13.4
Partially pubescent....	95	16.6	102	17.8
Pubescent.....	383	66.8	394	68.8
Total.....	573	100.0	573	100.0

and June, 1930, is shown in Table I. From this distribution it is apparent that the teachers selected more mature than immature boys. The percentage of pubescent individuals among the boys selected for observation (66.8) may be compared with the percentage of pubescent boys in the entire school membership (46.2).

A detailed study of the changes in pubescence between January and June, 1930, indicated that only about 15 per cent of the pre-

pubescent individuals had changed to the partially pubescent stage and only about 3 per cent to the pubescent stage, while about 8 per cent of the partially pubescent group had changed to the pubescent stage. In this study separate tabulations were made for the changed and the unchanged groups, but it was thought that very little, if any, significance could be attached to the data concerning the changed individuals because of the small number of cases.

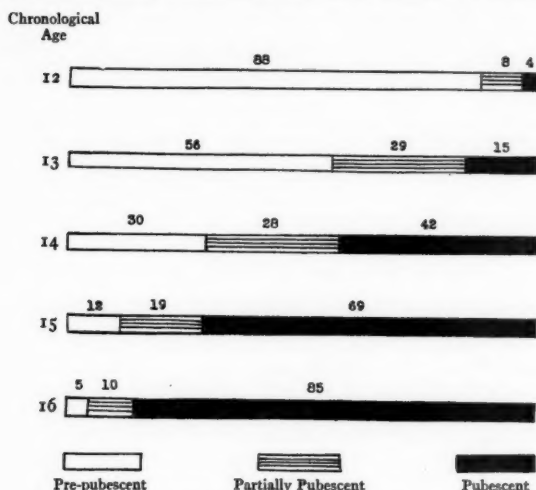


FIG. 1.—Percentage distributions, according to pubescence status, of 796 boys of chronological ages 12-16.

In a preliminary investigation of the problem of pubescence made in the same school in 1928-29, the writer studied the relation of pubescence to chronological age in the case of 796 boys. The results of that study are shown in Figure 1. An examination of this figure is interesting at this point, for light is thrown on the diverse physical and psychic factors in the personalities confronting the junior high school teacher in his classroom in his efforts to understand and minister to the needs of a very mixed group.

When the school grades to which the boys of the observation group belonged were analyzed, it was found that the largest number were in Grades IX B and IX A. The distribution of the observation

group by grades was almost the same as the grade distribution of the entire membership of the school, which at the time of the study had not acquired its full quota of younger pupils.

Intelligence.—The plan of ability grouping of pupils in the Detroit intermediate (junior high) schools rests on a threefold criterion consisting of a rating in a group intelligence test, chronological age, and the elementary-school scholarship marks in the principal subjects. The intelligence tests are administered by the psychological clinic maintained by the school system, and the results are reported to the schools in the form of letter ratings. Pupils with the two highest ratings, A and B, constitute the highest 20 per cent of the distribution on a city-wide basis and are known as the X group; those with the next three ratings, C+, C, and C−, form the middle 60 per cent

TABLE II
DISTRIBUTION OF 560 BOYS UNDER OBSERVATION ACCORDING TO
THEIR LATEST INTELLIGENCE RATINGS

Intelligence Rating	Number of Boys	Percentage of Boys	Usual Foch Percentage	City-wide Percentage
X.....	133	23.8	25.0	20.0
Y.....	335	59.8	60.0	60.0
Z.....	92	16.4	15.0	20.0
Total.....	560	100.0	100.0	100.0

of the distribution and are known as the Y group; while the pupils with the lowest ratings, D and E, comprise the lowest 20 per cent of the distribution and are known as the Z group. The distribution of 560 boys of the observation group according to the X, Y, and Z classifications is given in Table II, together with a comparison of the percentages of these groups with the corresponding percentages in the usual Foch School distributions and in the standard city-wide distribution. In the Foch School district foreign-language groups are not numerous, a condition which may account for the fact that the Foch distribution is higher than that of the city.

Scholarship.—Considering now the relation of pubescence to scholarship marks, we find in Table III the average percentage of each scholarship mark received in all subjects by 446 boys in different

stages of pubescence development. From these figures it appears that scholarship becomes poorer as development proceeds. A more detailed analysis of the marks by separate subjects (not reported here) showed that the more mature boys earned their best marks in the vocational and prevocational subjects and their poorest marks in the more traditional subjects of the curriculum.

Attendance and tardiness.—Comparisons of attendance and punctuality records, in the form of the number of days absent and the number of times tardy during the semester, with the pubescence data revealed that, as pubescence advances, both absence and tardiness increase. For instance, the percentage of pre-pubescent boys

TABLE III
PERCENTAGE DISTRIBUTION OF SCHOLARSHIP MARKS EARNED BY
446 BOYS WHOSE PUBESCENCE STATUS REMAINED
UNCHANGED DURING THE SEMESTER

SCHOLARSHIP MARK	PERCENTAGE OF MARKS			
	Pre-pubescent Boys	Partially Pubescent Boys	Pubescent Boys	Average
A.....	8.1	7.4	5.8	7.1
B.....	43.5	31.0	24.5	33.0
C.....	37.2	42.6	41.9	40.6
D.....	9.8	18.0	24.2	17.3
E.....	1.4	1.0	3.6	2.0
Total.....	100.0	100.0	100.0	100.0

who were absent ten or more days during the five-month period was 10.3, while the corresponding percentages of partially pubescent and pubescent boys were 14.4 and 21.1, respectively.

School citizenship.—In school citizenship, which in the Foch School is marked in terms of leadership, service, reliability, courtesy, co-operation, and self-control, the marks were found to become lower as pubescence advanced. All the below-average marks in citizenship were found in the partially pubescent and pubescent groups. The higher citizenship marks did not separate the groups so clearly, but the general trend was distinctly evident.

Conduct.—In the case of conduct, rated by the teachers as good, fair, or poor, there was found a decrease in those marked fair and a large

increase in those marked poor in proceeding from the earlier to the later stages of pubescence. The percentage of those marked good likewise decreased, though by smaller amounts. Whether pubescence itself may be regarded as the cause of unsatisfactory school conduct, in the sense that there may be something in the nature of the physiological change to make the individual behave in an anti-social way, cannot be established, of course, by this comparison with teachers' ratings. These ratings were made subjectively and may well be considered vulnerable, although not necessarily more vulnerable for one stage of pubescent development than for another.

In the observations of the specific faults cited by the authorities on adolescence,¹ it was found that in every case the frequency of occurrence of the behavior increased with the advance of pubescence. The differences were greatest in defiance, lack of application, cheating, and display of temper.

In summing up our studies of the conduct factor, we find that, whatever the causes which led to the maladjustments, the more mature boys were evidently at a disadvantage when compared with their less mature classmates, whether judged by teachers' subjective ratings, by marks in school citizenship, or by actual antisocial behavior observed in classes throughout a semester.

Peculiarities of behavior.—The next items observed were the peculiarities of behavior attributed by many commentators to this period of life, namely, marked awkwardness of movement, facial or other automatisms, daydreaming, emotional instability, infantile behavior, restraints and inhibitions, and alternations of mood. As it is impossible in this presentation to give the detailed results of the studies of all these factors, report will be made on one group only, emotional instability. The following specific reactions were regarded as indicative of emotional instability: excessive laughing, excessive pouting, temper tantrums, violent enthusiasms, brooding, excessive display of affection, and excessive display of antagonism. The observation records show that emotional instability appeared to increase as pubescence advanced. Emotional instability was observed

¹ The space available for this article does not permit discussion of many questions from the standpoint of the literature of adolescence consulted by the investigator in connection with the studies.

in 13.0 per cent of the pre-pubescent boys, in 28.7 per cent of the partially pubescent, and in 36.6 per cent of the pubescent. Similar trends appear in all the figures in the case of the other special types of behavior mentioned; in some cases the frequency of occurrence in the mature group was four times that in the immature group, the partially pubescent group occupying a position midway between the other two.

Adolescent diseases.—An interesting factor in connection with the period of early adolescence is the incidence of disease. According to the United States census, the death-rate is very low at this period of life; hence, the characteristic diseases of the period cannot be particularly serious. However, certain disease tendencies—notably anemia, headache, nervousness, excessive nosebleed, and palpitation of the heart—are held to be particularly prevalent among young adolescents. The observations of these tendencies made in this study revealed a slight increase in frequency as pubescence advances in all the diseases except anemia, where there is apparently no relation. These slight increases may have little meaning.

The intensive study.—In order to secure information in a different way, the principal investigator conducted an independent investigation, paralleling the teachers' observations, in which 193 individuals were studied more intensively. The information about the scholarship marks, attendance, punctuality, and school citizenship of the boys of this group was obtained from the school records, as in the case of the observation group, but as much information as possible with regard to the special adolescent behavior trends (as well as a large amount of information concerning other matters, such as organization membership, reading habits, attendance at commercial amusements, home life, sex instruction, favorite school subjects, favorite sports and games, and socio-economic data) was gathered from personal interviews. The tendencies in the observation group for poor attendance and punctuality records and for lower citizenship marks to be associated with the more advanced stages of maturity were not so clearly evident in the interviewed group. In all other respects, however, the same tendencies were observed and in about the same degree.

CONCLUSION

Separate tabulations of many different kinds were made, as well as a number of statistical computations, to check the validity of the teachers' observations and of other phases of the investigations. None of these appeared to throw into question the consistent trend discovered, namely, that matured and maturing boys show more evidence in their behavior of the traditional disturbances of early adolescence than do immature boys. The trend seems to be largely independent of chronological age, intelligence rating, grade placement, home conditions, and other factors. The poorer adjustment of the matured and maturing boy is especially evident in attendance, conduct, attention, application, and emotional behavior. It is possible that this situation, coming at the time of life when sexual maturity has just been completed or is in the process of being completed, may be interpreted as evidence that the phenomenon of pubescence development constitutes a more serious handicap to the individual in making his adjustments to life than many recent writers have believed.

It is thought that the results reported here, based on extensive rather than intensive study, might well be supplemented by further investigations of a more intensive type covering a longer period of time. Psychiatrists, using the psychoanalytic technique, could, it would seem, study individuals intensively to very good advantage. In any event, further study of the problems of early adolescence is urgently needed.

PROFESSIONAL READING OF YOUNG STUDENTS OF EDUCATION

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It is of interest to inquire into the reading preferences in periodical literature of young students in education. Provided they are permitted freedom of choice, will they read widely and impartially, will they search for something new and different, or will they keep to the topics with which they have a degree of familiarity? What types of articles do they prefer? Do they like reports of experiments or analytical discussions or accounts of surveys? Have they favorites among the magazines? What reasons govern their selections? What general trends prevail?

During the spring semester of the school year 1931-32 the students enrolled in the writer's section of a general course in secondary education at the University of California were required to read each week one article selected from the current periodical literature. The assignment continued over a period of thirteen weeks. The section was composed of sixty-one young men and women who were planning to teach in secondary schools. Most of them were of Senior standing; a few were fifth-year students engaged in their first practice teaching. The instructions stated clearly that the purpose of the assignment was to familiarize the students with the professional journals and to help them build up the habit of keeping informed. The students were told to select whatever interested them and were urged not to limit their reading to topics included in the course. A one-page report on each article was requested. At the end of the semester the reader's complete set of reports was returned to him for reference. Every week one or two articles were reviewed briefly in class.

Despite the request to read freely without regard to the limits of the course, it may be advisable to indicate the material of instruction. The units are as follows: "The School as a Social Institution,"

"The Development of a School System for a Democracy," "Characteristics of the High-School Population," "The Organization of the High-School Population for Educational Purposes," "The Processes of Learning and Teaching," "Measurement for Educational Purposes," "How Educative Materials Are Selected and Arranged."

A percentage distribution of the topics covered in the 769 articles reported is given in Table I. Well over a third of the selections deal with school subjects and problems confronting the teacher, such as tenure, salary, and training. Inspection of the school-subject reports showed that over 75 per cent pertain to the secondary-school level. A wide range of topics is listed, but many of major importance are noted infrequently or omitted entirely. In other words, the young student shows a marked preference for those topics which he considers most directly related to his own immediate problems. He is now a student in an institution of higher education and is soon to be a classroom teacher in a secondary school; no doubt graduate research and the problems of the experienced supervisor, administrator, and educational specialist seem remote.

The students' explanations of their selections are not without value. The reasons for choosing the various selections were included in the one-page reports. The following quotations are typical.

I selected this article because I thought it might give me a little valuable information upon the qualities of the successful student teacher, as I expect to be a student teacher next semester.

Feeling that the intelligence test they give prospective teachers is not an adequate measure of intelligence, I was interested in seeing what correlation existed between these tests and student-teacher success.

I chose this because I had just recently reviewed an article in favor of homogeneous grouping and I was interested in the other side of the story.

It is in the smaller high schools that young teachers are most likely to be placed, and it is interesting to know some of the studies that have been made concerning teacher participation in the administration of the small high school.

The reasons for the selections made are summarized in Table II. The table should be read as follows: Twenty-seven per cent of the reasons given had to do with the students' own special interests (as music, art, etc.), 15 per cent of the articles were discovered while

browsing, and so on. Even granting the vagueness of such answers as "I discovered it while browsing" and "The title intrigued me," the summary serves to complement the interpretation of Table I. According to the students' own testimony, they tend to choose those topics which bear directly on their own special interests, their future

TABLE I
PERCENTAGE DISTRIBUTION OF TOPICS TREATED IN 769
ARTICLES REPORTED IN OUTSIDE READING DONE
BY 61 STUDENTS IN EDUCATION

Topic	Per Cent
School subjects.....	25
Teachers.....	12
Higher education.....	7
Personality and mental hygiene.....	6
Society and education.....	6
General problems and trends in education...	6
Administration and school organization....	5
General methods in teaching.....	5
Comparative education.....	4
Pupil activities.....	4
Curriculum.....	4
Tests and marks.....	4
Miscellaneous topics.....	2
Pupil guidance.....	2
Correlation studies.....	2
Discipline.....	1
Grouping.....	1
Individual differences.....	1
Adult education.....	1
Supervision.....	1
School finance.....	1
Vocational education.....	0.4
Legal phases of education.....	0.4
Total.....	100.8

occupation, their college courses, and their personal problems. The tendency to broaden out and see the field in its entirety begins to take form in the 6 per cent of reasons which indicate a desire for acquaintance with the magazine and in the 10 per cent which suggest a desire to fill in gaps in information. On the whole, however, the students concentrate, reading to augment the information they al-

ready possess and to answer the questions which have arisen. There is no indication of pseudo-sophistication and a search for that which is new or bizarre in education, nor is there evidence of the broad, though discriminating, taste of maturity.

Someone with a skeptical turn of mind may wonder to what extent the brevity of an article contributes to its popularity. To answer this question, the writer analyzed the articles read and those not read in the issues of the *School Review* for 1931 and the first four

TABLE II
PERCENTAGE DISTRIBUTION OF REASONS GIVEN BY
61 STUDENTS IN EDUCATION FOR SELEC-
TION OF 769 ARTICLES READ

Reason	Per Cent
Relation to special interest	27
Discovery while browsing	15
Value as preparation for future occupation	12
Value in filling in gaps in information	10
Relation to personal problem	6
Desire for acquaintance with magazine contain- ing it	6
Relation to previous reading	5
Relation to college courses	5
Title	4
Desire to know author's point of view	4
Recommendation by other readers	3
Personal interest in author	2
Fulfilment of weekly requirement	2
Total	101

months of 1932. In so far as this journal and this group of students are representative, it appears to be true that the length of an article has little or nothing to do with its desirability. The articles selected for reading average 8.48 pages in length; those rejected, 8.97 pages.

A further question concerns the type of article preferred. Is the teacher in training interested in articles which are reports of experiments or does he like descriptions of school situations? Does he choose or reject an article because it summarizes the data already at hand? And so on. A classification of all the articles published in the *School Review* during 1931 and the first four months of 1932 is

presented in Table III. The similarity of the percentages for the articles read and the articles not read in the various classifications is striking. The table indicates clearly that for this group of students the type of material was not a choice determinant.

More than a hundred different periodicals were reported. Not all were purely professional but published articles of interest to the profession. *Harper's Magazine*, for example, offered two or three articles like that entitled "Parents as Children See Them." Thirteen re-

TABLE III
PERCENTAGE DISTRIBUTIONS, ACCORDING TO TYPE OF MATERIAL,
OF ARTICLES APPEARING IN "SCHOOL REVIEW" DURING 1931
AND FIRST FOUR MONTHS OF 1932 WHICH WERE READ AND
WHICH WERE NOT READ BY SIXTY-ONE STUDENTS IN EDU-
CATION

Type of Article	Articles Read	Articles Not Read
Report of questionnaire study.....	29	21
Analytical discussion or description....	21	24
Report of experimental study.....	17	19
Report of analysis of school documents..	14	19
Report of testing program.....	9	9
Report of personal-interview study.....	5	0
Summary study.....	4	7
Survey study.....	0	2
Total.....	99	101

ports were required; each student read an average of 8.3 different magazines. The journals reported ten times or oftener are listed in Table IV. The relative popularity of the various magazines reflects the fact that the readers were looking forward to high-school teaching and were therefore chiefly interested in high-school subjects. No doubt, this fact accounts for the high ranks of certain periodicals largely given over to secondary education and the rather low ranks of some journals, such as the *Elementary School Journal*, for example.

It is interesting to compare this list with that of Eells,¹ who classified some twenty-five hundred articles read by undergraduates at Stanford University. Five journals are common to the first ten on

¹ Walter Crosby Eells, "What Professional Magazines Do Prospective Educators Read?" *School and Society*, XXIX (April 6, 1929), 446-48.

both lists, namely, *Journal of the National Education Association*, *School Review*, *Education*, *School and Society*, and *School Life*.

An earlier list was compiled in 1917 from replies received from 253 members of the National Society for the Study of Education and the National Society of College Teachers of Education.¹ Four magazines are common to the first ten of that list and of the present

TABLE IV
PERIODICALS REPORTED TEN OR MORE TIMES AND
FREQUENCY OF MENTION OF EACH

Periodical	Frequency of Mention
Journal of the National Education Association . . .	81
School Review	75
Education	54
School and Society	42
Historical Outlook	31
English Journal	29
School Life	26
Junior College Journal	18
Mathematics Teacher	15
Elementary School Journal	13
Journal of Business Education	10
Journal of Adult Education	10
Journal of Health and Physical Education	10
University High School Journal	10
School	10
American Teacher	10
Nation's Schools	10

list: *School Review*, *Education*, *School and Society*, and *Elementary School Journal*.

In 1927 La Poe² reported a list of periodicals most frequently read by 381 senior high school principals. The present list and La Poe's list have three journals in common among the first ten: *School Review*, *Education*, and *School and Society*. These three are common to the first ten in all four lists.

The reactions to the reading assignment for the semester afford

¹ "Public Libraries and Educational Journals," *School and Society*, VI (October 13, 1917), 433-34.

² James L. La Poe, "The Senior High-School Principals' Professional Magazines," *Educational Research Bulletin* (Ohio State University), VI (September 14, 1927), 259-61.

interesting insight into the psychology of students at this level. They are neither mature in their professional reading nor completely immature. They are too professional to base their selections on brevity, and in general they do not read merely for the sake of meeting the course requirement. Further, they do not read without plan. They show marked preference for topics with which they are more or less familiar by reason of previous reading, college courses, practice teaching, and so on. There are indications of a desire to broaden the perspective. For example, one or two students investigated legal phases of education, and one or two touched school finance. On the whole, however, the reading is limited to the sphere of the more immediate interests. There appears to be a desire for authoritative dicta to guide the early attempts at practice teaching. The young student is not greatly concerned about conflicting theories in education, about types of experimentation, or about major educational problems to be solved. He thinks in terms of pupils and subject matter to be taught and of such general trends and administrative policies as affect him now or as will affect him in the near future. It would be extremely interesting to follow these students for a period of years and study their professional reading preferences after they have acquired a modicum of experience.

SUMMARY OF INVESTIGATIONS OF EXTRA-CURRICULUM ACTIVITIES IN 1931. II

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The material that follows constitutes the second of two articles concerning the literature published on extra-curriculum activities during the year 1931. The first article presented an annotated bibliography of seventy studies and nine books. This article gives a short summary of the objective investigations and of some of the studies that offer critical analyses. The techniques employed by the authors can be only barely mentioned. During 1931 but little attention was given to the difficult problem of evaluation.

IMPROVEMENT OF SUPERVISION

Several studies make contributions toward the improvement of the supervisory work of sponsors and principals. Hayes (24)¹ shows how a survey of the extent and the nature of pupil participation in extra-curriculum and extra-school activities may reveal unwholesome or lopsided development of personality traits in the individual. The children of common laborers participated comparatively little in extra-curriculum activities, he found, yet they needed social training more than the children of the higher economic classes. Little participation, long study hours, and poor marks were often found together. Pupils with such records needed help in methods of study and encouragement to enter activities. Other pupils whose health records showed a need of sunshine and the open air spent much time at home in the sedentary and solitary pursuits of music and reading. The author's conclusion is that effective guidance cannot be carried on without full records of participation, including the amount of time spent in each activity.

¹ The numbers in parentheses refer to the numbered bibliography in Paul W. Terry, "Summary of Investigations of Extra-Curriculum Activities in 1931. I," *School Review*, XL (September, 1932), 505-14.

Maller (38) presents two forms of a test designed to measure different aspects of trustworthiness as these may be developed in sports and hobbies. This instrument is similar in construction to the Self-Marking Test¹ and can be used to evaluate training in activities in which the development of the ideal of trustworthiness is an objective. The production of a larger number of tests of this kind will substantially advance the work of evaluation. Grant (19) describes the means employed by the national fraternity, Delta Tau Delta, to raise the scholarship and cultural levels of its undergraduate membership. As a result of the efforts of a national supervisor of scholarship appointed in 1923, the local chapters by 1928-29 raised their marks to the level of the average of all men in all institutions in which the fraternity was represented. During the course of a year's work the scholarship preceptor at the University of Illinois trained the local chapter so effectively that it rose from a rank next to the bottom to a rank next to the top in scholarship among the fifty-five fraternities on the campus.

Two writers present supervisory check lists. Fretwell's list (14) offers ten tests for judging the effectiveness of a club's work and includes such criteria as commonness of interest and the extent of active participation in the club's work on the part of the members. Two rating cards to be used by the principal, one after the first visit and the second after a semester's observation, are offered by Roemer (50). As a list of standards for judging the value of the work of the sponsors of clubs, the cards include from sixteen to twenty questions, such as, "Is she skilful in offering constructive criticism?" The questions are presented under three heads, namely, fitness, attitude, and technique.

By analyzing psychologically the experience of a debating team from the beginning to the end of its work, Carroll (9) observed, among other things, periods of staleness, fear, and overconfidence. He suggests that careful observation of this kind will enable a coach to relieve the pupils temporarily of their work, to encourage them, or to reduce assurance according to their needs more effectively than he can otherwise do. Jennings (27) describes a type of dramatic-club

¹ J. B. Maller, *The Self-Marking Test, Forms A-S and B-S*. New York: Teachers College, Columbia University, 1930.

organization which consists in a combination of open and closed groups. The latter includes the pupils who are actually at work on a production or who are leaders of departments. The former includes ambitious pupils who help here and there but who have not yet been admitted to the inner group. The value of this plan lies in the fact that it stimulates all to make great efforts either to get into the closed group or to remain there.

EXTENT AND EFFECTS OF PARTICIPATION

The extent and the effects of participation were studied in several investigations. Strang (63) examined 1,614 pupils in junior and senior high school with a test of knowledge of common social usages containing 110 items. She reports that the mean scores increased from the seventh to the twelfth grades, with less marked increases from the eleventh to the nineteenth years of age. Pupils having high intelligence quotients, those from homes of higher economic status, and those holding office showed greater knowledge of social usage. Little ground for the widespread belief that the high-school population is correctly described by the term "flaming youth" was found by Shipp (59) after a study of 665 boys. He reports that, although 50.1 per cent of the boys are allowed to go out on school nights whenever they please, 30.5 per cent do not dance, 45.1 per cent never attend dances, 17.2 per cent of the Seniors never attend parties, and 28.3 per cent of the Seniors never go out with girls. The percentages replying with the answer "seldom" to the questions dealing with these activities are much larger.

Gorsline (18) asked the pupils of a Montana high school how they spent their leisure time. Among other things he reports that 27.6 per cent of the upper-class men spent none of their time in fishing, hiking, tennis, or other outdoor activities, although they live "in the heart of nature's greatest playground." The frequencies of non-participation in reading (5.9 per cent) and in listening to music (8.2 per cent) are much lower. The program of extra-curriculum activities, he concludes, should do more to encourage physical activities. A similar conclusion is reached by Prall (48), who likewise reports a comparatively low participation by senior high school pupils in outdoor activities.

Mayberry (39) evaluated the effect of membership in a student council by comparing thirty-nine members with a like number of non-members who were similar to the former in sex, grade level, socio-economic background, and mental age. When he compared the scores made at the beginning by both groups on the Upton-Chassell citizenship scales with their scores at the end of the semester, he found a significant difference in favor of the council members. Intelligence, as measured by the Psychological Examination, 1930 Edition, of the American Council on Education, was not taken into account by rushing fraternities, Harriman (22) concluded after he had compared the scores of one hundred pledged Freshmen at an eastern university with the scores of one hundred Freshmen not pledged and had found a small difference which was statistically unreliable. Ewart (13) found that the 416 students elected to Phi Beta Kappa at Colgate University during the last three decades were not "grinds." An average of less than one a year took no part in student activities. Fifteen were outstanding athletes of their college generation, 143 won positions of great leadership in the student body, 49 were varsity debaters, and 70 were managers of organizations. Eleven per cent of the Phi Beta Kappa members of the 1900-1910 classes are to be found in *Who's Who in America* but only 1 per cent of those who were not elected to Phi Beta Kappa. Harris (23) studied the extra-curriculum records of 330 native-born Jewish Freshmen, from homes in which foreign languages were spoken, at the College of the City of New York. He found that the ten students who engaged in four kinds of activities made the highest average marks and that their Army Alpha scores were slightly higher than the average of the group. The council members and officers of organizations averaged higher both in grades and in intelligence than the group as a whole.

The effects of the economic depression on the student life at the University of Michigan are reported by Angell (2) to include reduction of the ability of organizations to collect money from students and others, reduced programs on the part of musical and dramatic organizations as a consequence, less participation on the part of adversely affected students, and a greater flourishing of intramural athletics.

ADMINISTRATIVE PROBLEMS

Four studies were concerned with administrative problems. Ke-fauver and Bullard (31) sent questionnaires to 104 junior colleges. They report that the great majority of the administrative heads are giving definite encouragement and direction to extra-curriculum activities with the exception of fraternities, which are generally prohibited. The outstanding difficulties encountered in developing activities proceed from the fact that practically all students live at home, retain their contacts with out-of-school activities, and are consequently less interested in school organizations. Furthermore, a large majority of the students are new each year. One hundred and seventy-five different organizations were found. The number of organizations in single institutions ranged from two to eighty-six, with nineteen as the median in private institutions and fourteen in the public colleges. Athletic and literary organizations occupied first and second places in frequency. Other important facts are reported concerning the selection of sponsors and the amount of supervision given. In another investigation the same authors (32) found that high-school and junior-college students were separated in their activities in 85.1 per cent of the public institutions, whereas in the private institutions they worked together in all activities in 48.1 per cent of the cases and in some activities only in 31.5 per cent. Their data also showed that the majority of the junior colleges have "functional administrative connections with the high school" (32: 260).

Significant data concerning the preparation of principals and teachers for supervising activities were brought to light by Gilchrist (16), who asked 233 individuals to check from a list of 77 items included in the training courses of high-school workers those items in which their preparation had been inadequate. "Extra-curriculum activities" was checked 98 times; the related items, the "Social maturity of secondary-school pupils" and the "Measurement of conduct," were checked 54 and 76 times, respectively. No item was checked more than 109 times nor less than 12 times. Petit (46) criticizes high-school contests because he believes they cause overstrain to coaches and pupils, neglect of the many for the few, and overemphasis on the desire to win. Such contests, he found, are sponsored mainly by higher institutions in their "mania" for greater enrolments.

ATHLETICS

No part of the field of extra-curriculum activities was studied during the past year with more substantial results than athletics. Under the auspices of the Carnegie Foundation for the Advancement of Teaching, Savage, McGovern, and Bentley (56) investigated conditions at 164 colleges and universities. Only a few of the important conclusions presented in their report can be mentioned here. In 1930 the gate receipts from football declined materially in twenty-five institutions but increased in eleven. A number of institutions have added materially to their facilities for intramural sports. The enthusiasm of undergraduates for football is subsiding in thirty institutions, and in a few a wholesome change is taking place in the attitude of alumni. A number of institutions are attempting to mitigate the abuses of recruiting and subsidizing athletes. For further information the reader must be referred to the original report.

Burnett and O'Brien (8) studied the injuries received in football in Massachusetts high schools by approximately five thousand boys playing in 1929 and in 1930. No fatal injuries were sustained, and only one boy was injured seriously enough to prevent his playing football after recovery. In 1930, 10 per cent of 5,456 players were injured, including 3.2 per cent who received major injuries (fractures, dislocations, concussions, and the like). The percentages were lower in the Boston high schools and in the squads of fifty boys and more. Physicians were present at the games of 64 of the 106 schools. The Committee on Athletics in Secondary Schools of the North Central Association (42) reports that more than 76 per cent of 1,751 schools favored the extension of the regulatory activities of the association to interscholastic athletics, 68 per cent favored withdrawal from national tournaments, and a majority favored withdrawal from state championships in football and baseball. Interscholastic contests for girls were opposed by 1,063 schools and state championships for girls by 1,262 schools. For other significant data and recommendations, the reader is referred to the original report. Seventeen studies of the relation between scholarship and athletics in the high school are summarized by Jacobsen (26). Ten studies reported better grades on the part of athletes or improved scholarship during participation, four reported no noticeable effect, and three detri-

mental effects on scholarship. With regard to mental abilities, two studies reported athletes slightly above the average, two slightly below, and one at the average.

MISCELLANEOUS STUDENT ORGANIZATIONS

Two studies present data on the assembly. The faculty committee on assembly programs at the State Teachers College of Trenton, New Jersey (3), sent questionnaires to thirty teachers' colleges and to twelve liberal-arts colleges. Among other things they found that a compulsory assembly, varying in length from fifteen to sixty minutes, occurring once or twice a week, co-operatively planned and conducted by faculty and students, is typical of the teachers' colleges, whereas the typical liberal-arts college has a short, daily chapel service of a religious nature. After obtaining data from 310 high schools in four Pacific northwestern states, Russell (53) reports that principals or teachers usually plan and preside over assemblies, that the assemblies most frequently last from forty to fifty minutes, and that, as a rule, the hours at which the assemblies are held are irregular. The assemblies are held mainly on Fridays and Mondays, four times a month in 37.4 per cent of the schools and twice a month in 19.7 per cent.

Ryan (54) analyzed the types of plays available for high-school dramatics and concluded that there is little worth-while material adapted to adolescent needs. He suggests that teachers and playwrights should collaborate for the production of suitable plays under the auspices of some organization like the Department of Secondary-School Principals. Pierce and Goodman (47) examined thirty-five newspapers in the elementary schools of Chicago. The typical paper, they report, contained four pages, seven by ten inches in size, with two or three columns either printed or mimeographed. Simplicity of form and a lack of organization of content and of generally accepted standards were characteristic. The papers published under faculty direction gave better training to pupils than those sponsored by parent-teachers' associations in collaboration with advertisers.

THE SCHOOL MAGAZINE IN EDUCATIONAL LITERATURE

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Since literature on the subject of the school magazine is not abundant and since staffs and supervisors of high-school journalism need enlightenment as to the present position of this type of publication, how to improve it, and what to put in it, the writers have made an attempt, represented by the selected bibliography appearing at the end of this article, to bring together a number of titles which would give information on virtually any phase of the subject. The most useful of the bibliographical items discovered by the writers are included.

Growing out of the subject of English composition as a means for literary expression, the magazine is the oldest of school publications (35).¹ With the rise of other journalistic activities, namely, the newspaper and the annual, the school magazine lost favor and has been on the decline. Nixon (26) in 1922 sent a questionnaire to high-school principals of the North Central Association of Colleges and Secondary Schools, and from the usable answers received from 210 principals he found that only 32 schools had magazines. Nine schools issued a magazine as the only form of journalism. In a questionnaire study in 397 junior high schools Karch (17) received reports of 78 magazines.

It is generally agreed that, if a school is to have any sort of publication, it should preferably be a newspaper. Just why the magazine has lost favor is accounted for by some of the writers. In an attempt to evaluate this publication, McKown and Hay (21) give opposing evidence to every argument advanced in favor of the magazine, so that they find it difficult to justify the existence of the magazine. With regard to its value in publishing school news, guiding school opinion, and encouraging worth-while activities, they believe that

¹ The numbers in parentheses refer to the numbered titles appearing in the bibliography.

the magazine fails because it lacks timeliness and persistency. That the magazine is an integrator of school spirit is questioned by McKown and Hay because only one-half the publications included in their study published prose relating to school life. Opportunities for expression of student opinion and for creative work were also found to be limited. The number of pupils who write for magazines is small, with the result that the benefits of expression and practice in journalism are secured by only a limited few.

Wells and McCalister (35) offer reasons for the declining popularity of the magazine. Pupils want something new and different. Magazines lack timeliness, appear only a few times a year, and publish uninteresting articles—English themes perhaps—which have no relation to the interests of the pupils. As a result, the newspaper has gained favor.

If the magazine is to succeed, definite determination must be made of the purpose the magazine must fulfil and how it can better achieve this purpose than it has in the past. Foster (8) believes that the following should be the purposes of the magazine: to serve as a medium of expression for the literary tastes and abilities of pupils and as a medium of expression of pupil opinion, policy, and spirit; to establish contacts in the community; and to serve as a medium of expression of art abilities. Jordan (16) adds that the magazine gives a record of school events and that the pupils on the staff receive opportunities to engage in worth-while activity.

Some of these functions are just as effectively served by the newspaper, if not more effectively. If the magazine is to succeed, therefore, it must obviously present something new to attract the attention of the pupils. Willard (36) suggests that the magazine reflect the more static, the more colorful, and the more detailed aspect of school life. News is not particularly essential. School life need not be recorded; rather, let it be *interpreted*. Let the articles deal with the school rather than with topics of no concern to the readers. Some of the references in the bibliography contain lists of suitable ideas for feature stories and human-interest stories, and many articles give suggestions on improving the content, the makeup, the art work, and other phases of the magazine. Especially recommended for such suggestions is Johnson's manual (14).

If the content of the magazine is improved and all the human-interest and feature possibilities in the school are utilized, there is no doubt that pupil interest can be stimulated. There is no place for the report of the Latin Club meeting of October 1 in the October 31 issue of this publication. Timeliness is lacking, the meeting is of no interest to the school personnel as a whole, and the story would probably be just a record of what took place in a "cut-and-dried" manner. Why not substitute for this type of material an article on the origin and development of some school tradition, what colleges the Seniors expect to attend next year, or a description of a school landmark that pupils see every day without giving it attention?

Several studies are listed which discuss prevalent practices. Karch (17), for one, gives the results of his questionnaire. Out of seventy-eight magazines reported, forty-two were issued monthly and the remainder at varying intervals. The most common page size was six by nine inches. The mechanics of printing and the business end of publication are taken up by Nixon (26, 27), who found that the total annual cost of producing a magazine ranged from \$200 to \$4,000, the average being \$1,275.

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The author pictures the place of school publications in pupil activities.
3. CAMPBELL, GLADYS. "The Creative-Writing Class in the University High School," *School Review*, XXXIV (January, 1926), 25-35.
A discussion of how a creative-writing class functioned and a summary of the work produced are given. A magazine was published containing the efforts of the class.
4. COLT, ARTHUR N. "Magazine Cover Makes First Impression," *Scholastic Editor*, III (May, 1924), 9.
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5. COX, PHILIP W. L. *Creative School Control*, pp. 210-11. Philadelphia: J. B. Lippincott Co., 1927.
A brief discussion of the purpose of the magazine is presented.
6. ELIZABETH MARIE, SISTER. "Magazine Is Printed in Water Colors," *Scholastic Editor*, IX (June, 1930), 13, 28.
The author describes how the staff at St. Joseph's Academy in St. Paul uses a water-color ink process to improve the appearance of its magazine.
7. FIXARY, ANNA M. "Your Literary Magazine Should Have a Theme," *Scholastic Editor*, X (January, 1931), 4, 32.
The author tells how the Lake View High School of Chicago selects a theme for the school magazine. Suggestions for preparing and carrying out ideas are presented.
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The aims of the magazine are discussed by the author.
9. FRETWELL, ELBERT K. *Extra-Curricular Activities in Secondary Schools*, pp. 340-50. Boston: Houghton Mifflin Co., 1931.
In addition to giving some historical facts about the magazine, the author summarizes various studies of this publication.
10. GREENAWALT, L. *School Press Management and Style*, pp. 222-43. New York: McGraw-Hill Book Co., Inc., 1930.
A chapter on the magazine is written by Gertrude Turner, adviser of the *Oracle*, prize-winning publication of Abington High School, Abington, Pennsylvania. A list of thirty-five questions for use in scoring magazines is included.
11. GREENE, KENNETH E. "Financing the Magazine—A Review of Recent Contestants," *Scholastic Editor*, VI (December, 1926), 6.
From a survey of the financial conditions of magazines entered in the 1926 contest of the Central Interscholastic Press Association, it was found that every magazine with a circulation of less than 250 showed a deficit, that the most popular selling price was twenty-five cents, and that the majority were monthly magazines. Suggestions for magazine editors to follow are presented.
12. HAYES, HARRIET. "The Problem of the High School Magazine," *University High School Journal* (University of California), II (July, 1922), 151-63.
The author discusses the status of the magazine and its problems.
13. "Ideas for Magazine and Annual Staffs," *Scholastic Editor*, V (January, 1926), 12-13, 15, 17; V (February, 1926), 13-14.
These two articles include summaries of addresses at the sixth meeting of the Central Interscholastic Press Association. Topics discussed are features, handling of copy, planning and budgeting, service for advertisers, good printing, and circulation problems.

14. JOHNSON, EDWARD M. *A Manual and Score Book for Editors and Staffs of Scholastic Magazines*. Minneapolis, Minnesota: National Scholastic Press Association (University of Minnesota), 1929. Pp. 20.
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15. JONES, ROBERT W. "Better Magazine Make-up," *Scholastic Editor*, IV (October, 1924), 13, 24.
This article gives an outline of fundamental principles for planning small publications, for proper balancing of pages, for arrangement of feature columns, etc.
16. JORDAN, RIVERDA H. *Extra-Classroom Activities in Elementary and Secondary Schools*, pp. 77-80. New York: Thomas Y. Crowell Co., 1928.
Jordan states that the school magazine gives publicity to the literary and artistic output of the entire school, serves as a record of school events, contains enough lighter material to satisfy the demand of the pupil for jokes, gives an opportunity for pupil expression, and gives excellent training in English. The business management of the magazine gives a sense of business values, a knowledge of commercial methods, experience in handling financial matters, and a knowledge of accounts and general business procedure.
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A report of a questionnaire study to determine the status of various publications, taking into account such factors as frequency of issue, size of publication, circulation, and printing.
18. KELLEY, R. W. "This Magazine Gives Real Ad Service," *Scholastic Editor*, IV (September, 1924), 6.
A brief résumé of a magazine's advertising policy.
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A list of common faults found in magazines, with suggestions for their elimination, is given.
20. MCKOWN, HARRY C. *Extra-Curricular Activities*, pp. 364-77. New York: Macmillan Co., 1927.
A vigorous discussion of the faults of the magazine is presented, with the statement that the magazine is secondary in importance to the newspaper.
21. MCKOWN, HARRY C., and HAY, HOMER W. "An Evaluation of the Magazine," *Scholastic Editor*, VI (March, 1927), 7-8, 12.
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22. MEYER, HAROLD D. *A Handbook of Extra-Curricular Activities in the High School: Especially Adapted to the Needs of the Small High School*, pp. 201-3, 233-36. New York: A. S. Barnes & Co., Inc., 1926.
Includes sixteen points on how to improve the magazine and how to make it more interesting.

23. MILLER, O. H. "Big Field for Special Articles," *Scholastic Editor*, IV (February, 1925), 7-8.
The author criticizes dull features in magazines, discusses feature articles, and gives a list of ideas for writing such articles.
24. MORRILL, J. L. "Cover Design for Magazines," *Scholastic Editor*, VI (March, 1927), 6, 14.
Morrill gives a valuable discussion of such factors as types of covers, stock, styles of type, and binding as they relate to the cover.
25. MYERS, JOSEPH F. "Place of the Magazine in School Journalism," *Scholastic Editor*, V (June, 1926), 3.
Myers states that the magazine stimulates good writing, develops literary atmosphere, and serves as a socializing force.
26. NIXON, O. F. "The Cost and Financing of Student Publications," *School Review*, XXXI (March, 1923), 204-12.
Nixon reports the results of a questionnaire study concerning purpose, type of publication, management, financing, and local attitude as these factors relate to student publications.
27. NIXON, O. F. "Student Publications in High Schools," *American School Board Journal*, LXVII (December, 1923), 45-47.
This article contains a discussion of a questionnaire study in which the author attempted "to determine what is being done in the matter of student publications" and how the work is being handled.
28. OLBRICH, ISABEL. "Secrets of a Successful Magazine," *Scholastic Editor*, IX (March, 1930), 17, 23.
This discussion relates to purpose, features, art work, departments, and advertisements.
29. O'LEARY, ABIGAIL. "Something Has Happened to Youth," *Scholastic Editor*, XI (April, 1932), 8-9, 25-26.
The decreasing popularity of the magazine is discussed, but reasons why the magazine should be maintained are given.
30. REAVIS, W. C. "Student Publications in High Schools," *School Review*, XXX (September, 1922), 514-20.
The author discusses types of school publications and the major problems. The functions of school publications are evaluated.
31. ROHRBACH, QUINCY ALVIN W. *Non-athletic Student Activities in the Secondary School: A Study of Aims and Functions*, pp. 202-4. Philadelphia: Westbrook Publishing Co., 1925.
The results obtained from an analysis of seventy-five magazines are presented.
32. SMITH, J. W. "Values of a School Paper for the Junior High School," *High School Teacher*, I (February, 1925), 8-9.
Smith discusses a monthly magazine for the junior high school.

33. SUTOR, JULIA LOUISE. "What Should the Magazine Contain?" *Scholastic Editor*, IX (November, 1929), 15-16.
Makeup, harmony, features, and departments are discussed.
34. TERRY, PAUL W. *Supervising Extra-Curricular Activities in the American Secondary School*, p. 210. New York: McGraw-Hill Book Co., Inc., 1930.
Reasons for lack of support of the magazine are presented, with a discussion of the values of the magazine.
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The authors discuss the following topics as they relate to the magazine: origin and status, types, purposes, frequency of publication, name, cover, page size, contents, interviews, travel stories, correspondence, alumni notes, illustrations, editorials, art, advertising, makeup, causes of failure, methods of making the magazine effective, and staff organization.
36. WILLARD, MARGERY. "What's the Matter with the Magazine?" *Scholastic Editor*, V (October, 1925), 4, 16.
Methods of making the magazine interesting and timely are stressed.
37. WYMAN, GERTRUDE B. "Methods of Teaching Creative Writing with Especial Reference to Poetry," *Educational Method*, XI (February, 1932), 295-98.
This outline of methods in the writing of creative poetry has definite implications for the school magazine.

Educational Writings

REVIEWS AND BOOK NOTES

A critical review of secondary education.—For some years general textbooks in secondary education have rather consistently been written to treat one or the other of the following major aspects of the field: (1) principles or methods of teaching and (2) the purposes and nature of secondary schools. The same division has found increasing favor in the organization of the courses of undergraduate teacher-training curriculums. A recent volume¹ stands in contrast to the usual practice by offering a treatment inclusive of both these large fields.

The discussion is organized under twenty-five "principles" of secondary education instead of the usual transparent topics. The result is to obscure rather than to clarify the plan of the book. A reading of the volume, however, reveals some consideration given the following items in secondary education: the history of American secondary schools, the nature of adolescence, individual differences, mental hygiene, laws of learning, transfer of training, the curriculum and the extra-curriculum, objectives, homogeneous grouping, methods of teaching, measurement, co-operation with other educative agencies, and guidance.

From the title and briefly indicated content of this book, one might well imagine that it would be of service in the undergraduate, pre-service training of secondary-school teachers. However, in the opinion of this reviewer, the style and treatment are inappropriate for such use. The volume is not characterized by the straightforward exposition and description of educational institutions and procedures which young readers need. For the adequate initiation of undergraduates into professional thinking, a substantial body of fact and detailed statements of modern educational theory are demanded. By contrast, this work of Professors Cox and Long is highly allusive; it is critically interpretative rather than expository; it assumes an orientation in educational practice, problems, and philosophy which can only be expected in advanced students of education.

To the latter group, accordingly, the book is recommended. They may be disturbed by the discursive character of some chapters and the brief, sketchy treatments meted out to some topics, but they will find food for thought in the modern philosophy which characterizes the authors' views of secondary education.

¹Philip W. L. Cox and Forrest E. Long, *Principles of Secondary Education*. Boston: D. C. Heath & Co., 1932. Pp. viii+620. \$2.40.

They will be challenged to make more substantial the connection of their schools with life. They will feel impelled to recognize the educative influence of the whole school environment and the consequent necessity of conditioning it to accomplish desirable changes in the pupils. In the hundreds of practical school situations which the authors interpret, these readers will see the application of theory. They will thereby acquire more refined conceptions of what education is and how it is accomplished. In such significant promotion of the educational insight of teachers and administrators lies the service of this book.

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For students of administration.—A textbook in the field of secondary-school administration¹ announces in its Preface that it is a treatment of significant and practical aspects of secondary-school administration, designed primarily for use in courses in the organization and administration of secondary schools. It contains twenty-one chapters dealing with the following topics in the order named: the extent and character of secondary education; the administrative and teaching staff; office routine and care of the building; constructing the daily schedule; the control of pupils; the administration of the guidance program; the values and organization of extra-curriculum activities; the administration of school clubs, dramatics, debating, and music; the direction of school publications; the school assembly; the school library; health and physical education; the principal and instructional problems; the principal and the direction of study; the selection of textbooks; examinations and marks; the secondary school and standardizing agencies; secondary school and college relations; the public-relations program; the large high school; and the small high school. In addition the book contains fourteen appendixes. These deal with the following topics: objectives of secondary education, excerpts from an administrative handbook, requirements for teachers' certificates, policies governing school routine, a proposed co-operative guidance program for secondary and higher education in Florida, a home-room score card, school clubs, new library standards, practices in the selection of textbooks, a state uniform marking system, standards for secondary schools of the North Central Association, the constitution of the Department of Secondary-School Principals of the National Education Association, the program of studies in a small high school, and topics for term reports.

As an introductory textbook for beginning students in the field of high-school administration and for high-school teachers who need an overview of the problems concerned in the administration of the school, the book has considerable merit. It includes important material not included in earlier books on high-school administration, as, for example, a discussion of standards and standardizing agencies; the objectives of secondary education proposed by the Committee

¹ James B. Edmonson, Joseph Roemer, and Francis L. Bacon, *Secondary School Administration*. New York: Macmillan Co., 1931. Pp. x+484. \$2.25.

on the Objectives of Secondary Education of the Department of Superintendence; the library standards of the Association of Colleges and Secondary Schools of the Southern States; the policies, regulations, standards, and recommendations of the North Central Association; and the constitution of the Department of Secondary-School Principals of the National Education Association.

As a comprehensive treatment of the administration of the modern American high school, the book is a disappointment for three reasons: (1) It is incomplete. (2) Many of the topics included are treated too briefly. (3) The references are inadequate.

The field of high-school administration has become exceedingly complex. A treatise on high-school administration must necessarily be extensive; it cannot be limited to a book containing less than five hundred pages. The present volume presents a brief discussion of the objectives of secondary education but no statement of fundamental administrative principles on which the work of the high-school principal should be based. The pupil population is not given adequate treatment. The reader unfamiliar with the modern high school would conclude that records of the pupil population, of the teaching staff, and of the school as an institution are matters of minor importance. Conspicuously absent is any discussion of the problems of daily administration: attendance and tardiness and their control and pupil accounting each period of the day. Other notable omissions are treatments of the costs of instruction, the high-school budget, the inventory, and fire drills and other safety measures.

The book suffers, not only on account of its incompleteness with respect to the topics treated, but also on account of the inadequacy of the treatment of many of the topics included. The school library is accorded a chapter of seven pages. The treatment of this important problem is very general in nature. Teaching the use of the library is emphasized, but no reference is made to books or other materials for instructing children in the use of books and libraries. One wonders why Logasa's *The High School Library* is at least not given as a special reference, as well as several other references from the extensive literature on high-school libraries, as, for example, the report by C. C. Certain on *Standard Library Organization and Equipment for Secondary Schools of Different Sizes*.

The small high school is given thirteen pages. The advantages and disadvantages of such schools are pointed out, and a discussion of the curriculum problems is given. Then are formulated six principles of curriculum construction for the small high school. The validity of these principles will be accepted by everyone, but it is surprising to find that no mention at all is made of ways and means of broadening the program of studies of the small high school. The reader will not learn of the use that has been made in recent years of correspondence courses in small high schools, nor will he be led to realize the importance of consolidation of small high schools.

In the judgment of the reviewer, a fatal weakness of the book is the limitation of references to a "Class Library" of only eleven titles and to a very limited

number of "Special References for Extensive Readings." The literature of high-school administration cannot be found in a few selected books; it is contained in numerous journal articles, monographs, reports, etc. The following are some notable materials that one would expect to find in the references of any textbook on high-school administration which are not found in the book under review: Willard Stanley Ford, *Some Administrative Problems of the High School Curriculum*; Hannah Logasa, *The High School Library*; Strayer and Engelhardt, *Standards for High School Buildings, Record Book for High School Principals, and High School Inventory Book*; Morgan and Cline, *Systematizing the Work of School Principals*; Reeves and Ganders, *School Building Management*; Zaidee Brown, *Standard Catalog for High School Libraries*; and the *Cardinal Principles of Secondary Education*.

On page 76 of the book occurs a regrettable failure on the part of the authors to inclose a direct quotation in quotation marks and to give credit for the material quoted. The material beginning with "Whenever tabulations are for purely administrative purposes" and ending with "size of individual departments" has been taken almost verbatim from an article by Fitzpatrick appearing in the *American School Board Journal* in April, 1929.

D. H. EIKENBERRY

OHIO STATE UNIVERSITY

English in its relation to the whole curriculum.—A monograph¹ summarizing and interpreting studies which have focused on the interrelation of English with other subjects of the curriculum has already received much approbation. From the same author in 1928 came a general source book of investigations relating to grammar, language, and composition. The new monograph holds strictly within the limits which the author sets for it, namely, the consideration of studies "which during the past two decades have attempted to broaden the scope of English instruction" (p. 1).

Even if the monograph served only to write anew, with convincing emphasis, the doctrine of "the common responsibility of all departments for the development of proficiency in language" (p. 2), it would be an important document. It does much more, however. It reports briefly numerous studies in the English curriculum, offers conclusions based on the author's interpretations, and presents valuable suggestions for objective studies in connection with various phases of the problem of expansion and correlation. Practical students will, of course, examine the author's own statement of the uses which the monograph is designed to serve.

Perhaps the most refreshing quality of this discussion and evaluation of educational studies is the frankness with which the author acknowledges the lack of objectivity in most of the studies reported. Often such convincing efforts are

¹ R. L. Lyman, *The Enrichment of the English Curriculum*. Supplementary Educational Monographs, No. 39. Chicago: Department of Education, University of Chicago, 1932. Pp. viii+252. \$2.00.

made to bolster the dignity of a study with the appearance of scientific procedure that we give excessive credence to the "findings." The author says:

An intensive examination of 264 "investigations" . . . in 1928 confined itself to studies which purported to have some scientific value. Methods of investigation were found to be very primitive and imperfect; factors for measurement were inaccurately segregated; measuring devices were often inadequate; elaborate statistical treatment was often accorded to data which in themselves were mere guesses. Almost universally the investigations were open to the charge of being fallacious in that they measured pupil products and assumed that by doing so they were measuring and evaluating the manifold intangible mental processes by which such products are attained [p. 5].

The lack of objectivity, however, does not render the conclusions of the experimenter or the expert worker valueless. Studies carefully conducted by persons of capacity and experience will lead to judgments that must have weight in our thinking. This point of view the author apparently accepts, and he endeavors to give a bird's-eye view of such judgments as revealed in scores of reported studies. The Bibliography contains 154 titles and should prove to be a rich mine of reference materials for the specialized student of education.

ROY IVAN JOHNSON

STEPHENS COLLEGE, COLUMBIA, MISSOURI

A serviceable manual of activities in the auditorium.—Auditorium work is one of the more important contributions to education that have come out of the recent reorganization of the elementary school. This type of work differs from extra-curriculum activities in that it is usually conducted by special teachers in a manner more nearly resembling that of the classroom, with more or less definite courses of study and with large groups of pupils. A valuable manual¹ for the use of those in charge of auditorium classes has been prepared by two authors who have had several years of experience in such work.

The first of the five parts into which the book is divided includes six chapters of an introductory nature. Historical backgrounds are briefly sketched in chapter ii. In chapter iii the value of the social aspects of the auditorium as an antidote to the individualism of much other learning is stressed. In chapters v and vi several types of auditorium work and the learning situations involved in them are distinguished. Distinctions are drawn also between auditorium work and that of the assembly and home room. To this extent only do the authors appear to recognize explicitly the fundamental similarity of auditorium activities in aim, technique, and content to the organized pupil activities that are already flourishing in numerous progressive junior and senior high schools. In the extensive bibliography found on pages 387-402 only one or two of the many excellent volumes on extra-curriculum activities which offer material helpful to the auditorium teacher are mentioned.

¹ Harry Graves Miller and Newton W. Chaffee, *The Auditorium Social Arts*. Boston: D. C. Heath & Co., 1932. Pp. xii+414. \$2.20.

The outstanding contribution of the book, and a timely one, is the description of practices in Parts II, III, and IV. Part II, with six chapters, gives excellent descriptions of auditorium work in the elementary schools of such cities as Gary, Kansas City, Dallas, and Cleveland. Detailed attention is given to such topics as aims, organization, activities, typical programs, and pupil outcomes. Auditorium work on the junior high school level is treated similarly in six chapters in Part III. Throughout Part III it is shown that larger responsibility can be given to pupils at this level than that given pupils in the elementary school. Part IV is concerned with the senior high school. In one of the two chapters character education at Dayton, Ohio, is discussed at length, and in the other chapter brief descriptions are given of the plans in use in different cities.

In the first chapter of Part V several investigations of auditorium work are reviewed, the next chapter deals with administrative problems, and the last chapter gives lists of teaching aids including a bibliography of several pages.

Teachers and principals alike who are interested in auditorium work will find in this book many stimulating and practical suggestions on the conduct of such work and on the great variety of activities that can be carried on at the several grade levels.

PAUL W. TERRY

UNIVERSITY OF ALABAMA

Investigating business education.—A history of business education would reveal, no doubt, a "cultural lag" if comparison were made with other aspects of education. If one examines historically such issues as curriculum construction, methods of teaching, measurement movements, and supervision and administration, it becomes evident that workers in business education have become aware of developments in other fields of education and have recently engaged in borrowings and adaptations for their own uses. A volume on research in business education¹ offers an excellent example of what the reviewer has in mind.

The book is a descriptive rather than a critical statement of the type of research which has been conducted in business education particularly during the past five years. It is not a textbook on how to do research in the field, nor is it an analysis of the development of techniques of research peculiar to business education. It is, rather, a summary of principles involved in educational research with special reference to this sphere of education. It outlines procedures for planning research projects and offers an analysis of types of research currently common in business education, such as educational and community surveys, occupational studies, job analyses, and other studies. The book contains a well-organized selection of abstracts of theses in business education and an excellent bibliography.

¹ Benjamin R. Haynes and Jessie Graham, *Research in Business Education*. Los Angeles, California: C. C. Crawford (University of Southern California), 1932. Pp. 232. \$2.00.

In many respects this volume treats research in an abbreviated manner, the same manner as that used in the well-known *Methods in Social Science* by Stuart A. Rice. Consequently, it suffers from the same limitations and is subject to the same criticism, namely, that it contains abundant illustrative material but no probingly critical examination of the methods underlying such work. It is a hurried treatment of the problems of research and does not go far in explaining terminology and symbols. In order to become familiar with, or to handle effectively, issues involving, for example, sampling processes or questionnaire construction, a person must be aware of underlying issues and implications. The reviewer's fear is that a student using this textbook would have more of a verbal than a real appreciation of the problems of research. For example, the author writes that properly conducted experimental studies are of great aid to education in evaluating teaching procedure, in establishing accomplishment norms, and in validating tests. Such statements are typical of the book. In a book on research the student needs details concerning such matters as the perplexities involved in the phrase "properly conducted" rather than the laudation of experimental studies.

Any review of the book must recognize its excellencies. It is a pioneer effort. It is a very useful manual for the secondary-school business teacher who is interested in research or the worker in other fields who wishes some acquaintanceship with recent developments in business education. It is suggestive of many studies which may be made in the field, and as a prelude to further work it represents a contribution.

H. G. SHIELDS

Textbooks in mathematics for the junior high school.—The continued emphasis on the unification of content in the materials offered for the junior high school grades is well represented in a new series of textbooks in mathematics¹ for Grades VII, VIII, and IX. A critical examination of this series reveals that a serious attempt has been made to organize the content into natural units and to present the appropriate subject matter of the major divisions of mathematics in one series of textbooks.

Book One, intended for Grade VII, gives major emphasis to arithmetic. Intuitive plane geometry forms the basis for much arithmetical computation and affords a background for an intelligent study of graphs. The reading and the drawing of graphs are emphasized. Incentives to study are afforded by having pupils keep records of their test scores on graphical score cards. Simple algebraic concepts for the solution of formulas for areas, percentage, and interest are introduced as optional material.

¹ Walter W. Hart, *Modern Junior Mathematics*: Book One (Grade Seven), pp. x+246, \$0.84; Book Two (Grade Eight), pp. viii+264, \$0.88; Book Three (Grade Nine), pp. viii+344, \$1.28; Teacher's Manual (Book One—Grade Seven), pp. 38, \$0.20; Teacher's Manual (Book Two—Grade Eight), pp. 32, \$0.20. Boston: D. C. Heath & Co., 1931.

Book Two continues emphasis on arithmetical computation. Much practical material concerned with the handling of money, buying, selling, borrowing, lending, and keeping simple accounts is introduced in this volume. Mensuration of solids and indirect measurement form the background for the geometrical concepts presented. Algebra is represented by literal notation, the equation, and positive and negative numbers.

Book Three is devoted largely to algebra. While some attention is given to other topics, chief emphasis is placed on "the first unit in algebra as defined by the College Entrance Examination Board." The treatment is simplified, and a wealth of instructional material is supplied. Examples from geometry are used as a basis for the study of formulas and problems, and continued facility in arithmetic is sought through computation in connection with algebra. A unit on demonstrative geometry is introduced for exploratory purposes.

Throughout the entire series optional materials, for exceptional and superior pupils, distinctly marked x and y , are presented. Series of mastery tests and of diagnostic tests are presented in each volume. These are followed by practice exercises. It is worthy of note that there are, respectively, six, eleven, and four diagnostic tests in the three books. Undoubtedly the number of tests, especially in the third book, is insufficient to diagnose adequately the specific difficulties of the pupils. Analysis reveals also that the tests are not sufficiently detailed to determine exactly where the difficulties of the pupil lie. However, they are a move in the direction of diagnosis, where comparatively little work has been done.

Teachers' manuals may be secured for the books. Seventeen pages of the manual for Book One and twenty pages of the manual for Book Two are devoted to aids and explanations for the teacher. The remainder of each manual gives answers to problems and exercises. The regular textbooks may be secured with or without answers.

The books are attractively made up and clearly printed. Explanations are simple, well written, and accompanied by solved examples. On the whole, the series appears to be well constructed for practical work in the junior high school grades.

O. L. TROXEL

COLORADO STATE TEACHERS COLLEGE
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An aid to specifications for school buildings.—The study¹ under review was made to provide a guide and a check list for the use of school superintendents and business managers in studying and suggesting improvements in proposed specifications for new school buildings. The check-list material presented in chapter iii may also be used as a general outline plan by the specification-writer.

¹ Lee Byrne, *Check List Materials for Public School Building Specifications Covering the General Specifications*. Teachers College Contributions to Education, No. 492. New York: Teachers College, Columbia University, 1931. Pp. viii+196. \$2.25.

The author presents in chapter ii his plan of organization for the check-list and specification material. The plan of organization of the check-list material is developed under thirty-five trade divisions as "first-order" heads, such as general contractor's work, excavation, foundation, carpentry, and painting. Each of these trade divisions shows the following subheads: general, materials, operations, parts (usually parts of building). To this frame or skeleton the author builds a "matrix," which he defines as the "initial list of aspects (determinables) each of which occurs a plural number of times in the same specification and so in a check list" (pp. 9-10). Chapter iii, which contains 153 pages of the total of 196 pages, is given entirely to the check list. In chapter iv the author presents briefly in ten pages the uses that may be made of the check-list material.

The material of the check list is derived from actual specifications of eighteen large school buildings, for the most part high schools, of recent construction. The study is limited to general specifications. The check list contains 11,649 items and, according to the author, has an average reliability index of 85 and an average completeness index of 87. This specification list is more extensive and complete than any yet published, and all items are weighted in such a manner that the indices of reliability and completeness may be obtained for any selections from the list.

OSMAN R. HULL

UNIVERSITY OF SOUTHERN CALIFORNIA

A helpful book on coaching high-school athletics.—Most of the books concerning the coaching of athletics deal primarily with the techniques of certain sports. In a recent book,¹ the scope of which is limited to the coaching of high-school athletics, the authors have given little attention to the techniques of games and have sought, rather, to guide coaches in the solution of the more common, although less often considered, problems which arise in this field. For example, separate chapters are devoted to such problems as (1) arousing and maintaining interest in athletics, (2) how to organize the athletic department, (3) how to finance the department, (4) how to develop good sportsmanship, (5) how to develop team spirit, (6) how to lessen the problem of ineligibility, (7) how to gain harmony and co-operation within the system, (8) how to give the school a good name in athletics, and (9) how to improve the condition of interscholastic athletics. Discussions on the place and value of athletics in education and on coaching as a profession are given early in the book. The book closes with a general discussion on the technique of teaching recreational games and of coaching competitive sports.

In gathering their materials, the authors have attempted to make the book practical. They state in the Preface that, in order to make certain that the prob-

¹ William G. Campbell and Ralph King Reed, *Coaching High-School Athletics*. Los Angeles, California: C. C. Crawford (University of Southern California), 1932. Pp. 208.

lems and the solutions should be true to life, they asked men actively employed as coaches to co-operate in furnishing the material. Of course, this method of gathering material renders a large part of the book a compilation of what experience has led coaches to believe are problems and solutions in this field. No tabular data are presented, and no use has been made of statistical data gathered by investigators in the field of high-school athletics.

The book in general places an excellent emphasis on the desirability of having the coach, in co-operation with his superiors, formulate a definite platform or policy which he expects to uphold and of acquainting pupils, parents, and community with that platform. The authors take the commendable attitude that in such a platform athletics will be considered part of a comprehensive program of physical activities in which more interest is taken in the health of the mass of pupils than in the success of a given team. The chapters dealing with (1) developing good sportsmanship, (2) lessening the problem of ineligibility, and (3) improving the condition of interscholastic athletics are stronger than the others. Some of the suggestions given for arousing and maintaining interest in athletics and for raising money for athletic equipment reflect the source from which the materials for the book were gathered and might not receive the sanction of administrators who are careful to safeguard in their schools an uninterrupted interest in scholastic accomplishment. The book is especially suited to beginning coaches but can be read with profit by experienced coaches and secondary-school administrators.

P. ROY BRAMMELL

CONNECTICUT AGRICULTURAL COLLEGE
STORRS, CONNECTICUT

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